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ABSTRACT

The purpose of this project was to demonstrate that comprehensive rehabilitation services can more effectively meet the needs of severely and chronically disabled persons living in an isolated, mountainous, and depressed area: the Appalachian region. Specific subsidiary purposes were (1) to demonstrate that utilization of various disciplines--including medical, vocational, psychological, and social--coordinated with assistance from other professional and nonprofessional groups, can more effectively provide rehabilitation services and (2) to demonstrate that development and utilization of community resources for rehabilitation will return a greater number of disabled persons to self-sufficiency, self-support, and self-esteem. Two organizations had major roles in administration of the program: Appalachian Regional Hospitals, Inc. and the Kentucky Bureau of Rehabilitation Services. The procedures used involved a referral system in which the disabled person, after comprehensive evaluation, was recommended for a particular type of service. Results indicated that all major objectives were realized. Some of the recommendations made were that a cooperative project with the Employment Service be established to serve as a liaison between job specialists in large cities and rehabilitation workers in Appalachia; that programs be developed to concentrate on whole family units rather than on the most obvious disability; and that psychological screening be used to uncover mental retardation or emotional illness in the family. (JB)

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REGIONAL DEMONSTRATION OF COMPREHENSIVE REHABILITATION SERVICES IN A RURAL, MOUNTAINOUS, ECONOMICALLY DEPRESSED AREA EASTERN KENTUCKY

RD - 1642 - M

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PREPARED BY

KENTUCKY BUREAU OF REHABILITATION SERVICES

DEPARTMENT OF EDUCATION

Harlan, Kentucky

October 30, 1969

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HIGHLIGHTS

ANTIGONE. I must go and bury my brother. Those men uncovered him.

CREON. What good will it do? You know that there are other men standing guard over Polynices. And even if you did cover him over with earth again, the earth would again be removed.

ANTIGONE. I know all that. I know it. But that much, at least, I can do. And what a person can do, a person ought to do.

--Jean Anouilh, Antigone
Act 1, Sc. 1

When the original proposal for this project was submitted the stated purpose was to "demonstrate the effectiveness of comprehensive rehabilitation services--medical, vocational, psychological, and social--to severely disabled, and chronically disabled persons living in an isolated, mountainous depressed area of the Appalachian region." The purpose of this final report is to relate the extent to which our basic goals were achieved. This will be done. However, our experience has convinced us the report would be far from

complete if we limited our discussion to the results of the project. The approach the project took was unique, especially to the area served, but far more important is the uniqueness of the area it served. In the introduction to a report by the President's Appalachian Regional Commission published in 1964, the Appalachian region was called "a region apart." In other publications it has been called "the by-passed America," a land of "yesterday's people," the "abandoned America," the "other America," and other such names. Tomes have been written to describe conditions which suggest the near impossibility of any satisfactory solution to the total problem of the area. However, men keep writing, people interested in social welfare keep hoping and numerous agencies continue to "bury their brother" even though the spectre of perpetual poverty, "standing guard over Polynices" continues to "remove the earth again." Successful corrective programs, like the one described in this report, have been conceived, proposed, funded, implemented, and even finished. However, considered in regard to the total problem, they have been little more than band-aide-like, stop-gap measures, demonstrating the need for more similar programs. Effective involvement in a particular problem necessitates closeness which, in turn, results

in the discovery of underlying conditions which have significance far beyond the problem under attack at the moment. Our involvement in Harlan and the surrounding counties has shown us, not only the significance of our program for these people, but also the significance of these unique people and this unique region for our program.

During the past five years we have observed the development of an unanticipated phenomenon. When we first began, we saw ourselves as "Givers" and not "Receivers." But, as time went on we realized we were both. Everything we have given has been returned tenfold in terms of expanding our understanding of a proud people dealing with a difficult environment, our appreciation of the dignity of the individual regardless of his circumstances, our more accurate conception of the complexities of family relationships, our awareness of the real worth of our efforts, and our sense of satisfaction stemming from the opportunity to give not only of our skills but of ourselves to a people whose needs for both are desperate. To focus clearly on the people we serve we will need a wide-angle lense. If we stand too close we miss much of the multifaceted background, and in doing so, blur the picture of the true mountain man. There is no place in the United States where the sub-culture is more

clearly a product of its social environment and the social environment more clearly a product of its sub-culture than in the Appalachian Region. For this reason, we feel we are justified in fixing the focus of this report on the unique characteristics of the area served and the people served rather than on the details of the project which served them. We have "done what we could do", but there is so much left undone, we would like to take this opportunity to stir the conscience of anyone who reads this report in the hope that one of them may come and help us "bury our brother" before the mounting crisis of urban unrest drowns out the cry of a betrayed people in an abandoned land and undermines the hope so recently generated by the war on poverty.

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CHAPTER I

INTRODUCTION

On April 9, 1963, President John F. Kennedy formed the President's Appalachian Regional Commission --- On May 2, 1963, young Negroes marched in Birmingham and the police used dogs and fire hoses to rout demonstrators --- On July 20, 1963, Russia and Communist China ended their ideology talks without resolving their long standing rift --- On August 21, 1963, South Vietnam attacked the Buddhist Shrines --- On October 7, 1963, President Kennedy signed the Nuclear Test Ban Treaty --- On November 22, President Kennedy was shot by a sniper in Dallas and Lyndon Johnson took the oath of office to become the 36th President --- On December 30, the 88th Congress ended its first session, the longest in its history for peacetime --- On January 8, 1964, President Johnson delivered his State of the Union message to Congress with War on Poverty and Civil Rights as his major issues --- On July 2, 1964, President Johnson signed the Civil Rights Act of 1964 on the same day it was passed by Congress --- and on July 31, 1964, Ranger VII hit the moon after taking, and televising to the earth, 4,316 close up shots of the moon's surface.

The trend of events was obvious. World-wide unrest was

mounting, internal distrubances were rumbling ominous threats of sociological storms to come in our own country, and man on earth was reaching even closer to the "man in the moon." At the same time, however, that he turned his vision out toward the stars he was becoming increasingly uneasy about the people he was leaving behind as he plunged onward in his quest for technological superiority. As a result of this uneasiness and the expanding demands of individuals for more consideration, legislation developed a distinctive pattern of growth. As the new tendrils reached ever upward toward the stratosphere, new roots reached downward toward the cultural substrata of our country, substrata essentially ignored until now. One of these roots reached Appalachia, and as Harry Caudill wrote in the forward to John Fetterman's book, "Stinking Creek," ... "The mountaineer has been discovered anew." According to Caudill, what was discovered was a vast territory:

> ... turned into a sprawling reservation with white people living among the same squalor and demoralization as that which afflicts the Cherokee remnant. As the land has yielded its wealth, as the social cripples have multiplied, and as the long betrayal has continued, the region has lost its social and economic underpinnings... The debasement of the mountaineer is a tragedy of epic proportions. It is the story of America's most calamitous failure.

One of the first major efforts on the part of the Government to strengthen the "social and economic underpinning" and mitigate the debasement of the mountaineer was the recent cooperative

program discussed in this report.

Years ago, while the Appalachian worker still crawled in and out of his dog hole mine essentially invisible to the outside world, union leaders took up his cause. Although the battle was long, bloody and eventually unsuccessful, it did leave behind, among other things, a chain of modern hospitals. These hospitals, now operated by an organization formed to salvage them when the union could no longer operate them, have provided a base of operation for a number of programs aimed at improving the status of health in Appalachia. One of these hospitals was the site of this present program. With the aid of a Vocational Rehabilitation Administration Grant the Rehabilitation Project Center was established at the Harlan Appalachian Regional Hospital in Harlan, Kentucky, to provide comprehensive rehabilitation services to physically disabled persons in Harlan and surrounding counties. The Center came into being as a demonstration project sponsored jointly by the Kentucky Bureau of Rehabilitation Services and Harlan Appalachian Regional Hospitals, Inc. and funded by the U. S. Vocational Rehabilitation Administration. Its primary purpose was the development of a program that could dispense comprehensive and coordinated rehabilitation services -- medical, vocational, psychological, and social -- to clients living in an economically depressed area that offers its citizens

few of the specialized medical services available in more prosperous areas of the United States. In demonstrating the practicability of bringing a team of rehabilitation professionals into the area, the project aimed to show that disabled persons in Eastern Kentucky can be rehabilitated in their own communities utilizing community resources in all phases of the process--from evaluation and diagnosis through treatment and re-training. If the project succeeded it should have fulfilled some or all of the following related objectives:

General Objective---

1. To develop a resource for providing comprehensive rehabilitation services to disabled persons requiring such services living in economically depressed Appalachia.

2. To increase substantially the number of severely disabled persons served and rehabilitated in this demonstration area.

3. To promote a community rehabilitation program which brings modalities of rehabilitation evaluation and treatment into an area in which such services are conspicuously absent.

4. To serve as a pilot area in the typical "depressed area" community to demonstrate the potential contribution of a comprehensive rehabilitation services program in solving the problems of each disadvantaged community.

Specific Objectives--

1. To test the effectiveness of modern rehabilitation procedures in a depressed, isolated, mountainous area.

2. To test the response of chronically disabled people living

in a typical Appalachian Mountain culture who have been provided the opportunity for comprehensive rehabilitation services.

3. To demonstrate the effectiveness of combining the services of the State vocational rehabilitation agency, the Harlan Appalachian Regional Hospital and Medical Center, and stated community resources in locating, evaluating, treating, and placing in jobs disabled persons in the project area.

4. To develop criteria for the selection of patients for vocational rehabilitation, using modern techniques of evaluation.

5. To determine the cost, nature of services required, and results to be expected in rehabilitation of severely disabled persons.

6. To identify, develop, and coordinate community resources for rehabilitation.

7. To amass dependable data concerning the nature, extent, and characteristics of the disabled population in the project area.

8. To identify the special problems that must be met in a "depressed area" community (in Appalachia) in organizing effective rehabilitation services for the disabled.

9. To determine the extent to which disabled persons living in a depressed area can be rehabilitated into employment with the provision of quality evaluation, treatment, training, and placement services.

CHAPTER II

THE SETTING

The Region

The jagged ridges and twisting valleys of Appalachia have constituted a formidable deterrent to assimilation of the cultural and economic benefits of an expanding national affluence. The geographical phenomena of Appalachia and their significance for present problems has long been recognized and much discussed. In 1960 the problem was thumbnailed by John D. Whisman, States Representative to the Appalachian Regional Commission who wrote, "Impenetrability is a major mountain country problem."

The mountain problem, common to most of Appalachia, is particularly acute in the seven county region considered in the present report. Mountains in this region range to more than 3,500 feet above sea level. Two airports in the area, Harlan Airport in Harlan County and Middlesboro Airport in Bell County are surrounded by peaks and unusable at night.

Although Kentucky can boast of thousands of miles of surfaced, all weather highways, and can compliment itself as the first state to complete Interstate I-75 from border to border, the closest super

highway bypasses Harlan 50 miles away. There are some reasonably well maintained roads which pass between larger communities. However, ambling off to each side much less impressive roads join with railroads and rivers in seeking out indefinite paths of least resistance from one town to the next. Many of these roads, like a continuous main street, pass through stringtown after stringtown, slowing traffic and creating additional hazards for people already overburdened with hazards. Most railroads as well as roads were originally constructed for the benefit of the extractive industries, coal and timber, and expediency rather than safety or comfort dictated their design. The best roads move from coal face to railhead, and thousands of people who have not been fortunate enough to find "a house by the side of the road" face daily difficulty in moving from one place to another. Although highways between major points are at least adequate for general transportation, the byways are often primitive lanes made impassable by bad weather and frequently destroyed in one day by torrents of water following a heavy snow or a cloudburst.

The significance of these conditions for the present project is apparent. Availability of the nearest medical facility cannot always be stated in terms of distance alone. If a child in Louisville, for

example, suffers an attack of acute appendicitis, the parents need only call a cab or an ambulance and travel seven to ten miles, wait for a few stop lights, and perhaps circumvent a one way street. The same emergency in hundreds of homes in Southeastern Kentucky could mean carrying a child down an impassable road for a mile or more to the first neighbor with a car and then driving as much as forty miles to the nearest hospital. If mountains were the only problem a network of modern highways might solve the region's problems, but in addition to impediments in mobility the region is plagued by a depressed economy, large-scale unemployment, high percentages of welfare recipients, educational inferiority, great numbers of untrained and marginally competitive workers, declining individual morale, community deterioration and widespread cultural deprivation.

There is a number of factors which contribute to these conditions of economic deprivation in Southeastern Kentucky. Although water transportation supports the economy in much of Kentucky, no navigable rivers touch the Southeastern region. Kentucky is noted for its high grade limestone, but most deposits are located to the east of the counties covered by this project. Oil, another natural resource which has contributed much to economic

growth in Western Kentucky, is nowhere to be found around Harlan. Natural gas wells, another rich resource and gas storage fields, a more recent economic boon, offer little to this region; gas wells are only sparsely represented and no gas storage fields are located in the seven county area.

The Coal Industry

The primary resource is coal. In fact, the entire area might be considered as a single extended coal field. This has particular significance for the project we are discussing here.

Coal mining areas throughout the world show that a society built over the years by relying on employment in the coal mines is likely to be characterized by inadequate communities, low educational attainment, and poor health. This is true for the area covered by this project.

A study conducted by a group of mental health professionals in Appalachia reveals that although the accident rate per man-hour worked has decreased over the years, the incidence of mental illness has increased. In summarizing their study the authors wrote:

> The goal of mental health can be stated simple: A good life well lived. The life of a miner falls short of this goal. Coal-mining is one of the most hazardous of occupations. The miner's subterranean existence fills his lungs with bad air and his mind with fears and frustrations. Inadequate housing, limited community resources and social isolation make up his supraterranean

> existence. The miner himself living in a social environment which is more frustrating than rewarding. His social outlets are extremely limited. Living and work conditions such as these are factors contributing to physical (silicosis) and emotional (anxiety-based smothering) suffocation...
>
> Mechanization is seen as a two-edged sword. It has disrupted the social cohesion of the work-team, with an increase in psychological stress. While mechanization may have increased production, it has intensified psychological stress and increased psychiatric casualties. Other stress factors discussed are disrupting social influences introduced from without as the result of changes in transportation and communications, and an unstable, fluid employment situation.
>
> The effect of the atmosphere in which the miner and his family live is discussed as being reflected in the apathy which surrounds much of his adjustment. He fights a losing battle at work and at home, and gives the appearance of "being tired of living and afraid of dying."

This statement has special significance when we realize that more than half the men who make up the working population of the Southeastern Kentucky are coal miners, and thousands of the disabled and destitute are ex-coalminers.

A report prepared a number of years ago by a government research team stated that "Health, indisputedly the greatest asset of a nation as well as of any individual, has not been adequately conserved nor protected in America". They found this particularly true in coal mining. In summarizing, they wrote

> "The conclusions that were evolved from the factual information obtained by the Medical Survey Group point, unfortunately, to

> many serious deficiencies in the lives of people employed in bituminous-coal mining. That these deficiencies are sufficiently serious and sufficiently widespread to merit the need for reforms is the composite opinion of all persons associated in the Survey. The adverse conditions reported with respect to some places are familiar to numbers of people, since they have existed for some time; but time continues to aggravate and augment the gravity of the situation, making corrective action more imperative than ever before."

It should be noted that this study was an exhaustive and readable one financed by both federal and U. M. W. A. funds. Included in the report were numerous well-conceived recommendations for the improvement of health through reasonable and fiscally sound programs. These recommendations were published in book form more than 20 years ago. This book, shelved in the medical library of the State University of a major coal producing state, has been checked out only four times in the past ten years. Perhaps this "unobtrusive measure" is sufficient to explain why those 20 year old conclusions remain valid today in a corner of America, the world's healthiest, most progressive, and most affluent nation.

This highlights a need to consider a definition enunciated in the constitution of the World Health Organization that "Health is a state of complete physical and social well-being and not merely the absence of a disease or an infirmity." The multifaceted problems of the population served will require a comprehensive approach in planning possible solutions.

Management Labor Relations in the Coal Industry

The traditional union leader who "was raised in the canebrake by an old mammy lion" and fought his way to the top with "one fist of iron and the other of steel" to become the daddy-idol of thousands of miners is being replaced by the professional, self-seeking magnate who manipulates union funds, "eats too high on the hog," and leaves a lot of miners with the growing suspicion that they are "gettin' took." The feeling of security the miner once derived from union membership is slipping away. Factions developing in the ranks are robbing him of support he might once have gained from fellow workers. "Hired guns" wiping out outspoken reformers of union corruption echo and re-echo like timbers cracking just before a pillar falls, and the fighting at the top is a cacophony of contradictions drowning out the miner's own self-questioning just as the machinery noises of mechanization in the mines drown out the life-saving detection of earth activity like "bumps, kettle bottoms and settling." In short, the individual coal miner is getting scared and with the scare comes increased suspicion. His distrust of anything innovative will be greater and his tendencies to feign agreement with a rehabilitation project with no intention of compliance will probably become more pronounced. Planning must include provisions for subtle approaches

to working him into the health delivery system as gradually as possible. There are indications that good management in the larger mines is beginning to serve as a source of emotional support to many miners who continue to vote and pay dues to the union but are becoming less convinced that it has a real interest in their welfare.

The Unemployed

More of the area's unemployed have more occupational experience in mining than in any other industry. The unemployed are mostly unskilled and tend to have few years of work experience. By and large the region's unemployed are family people, healthy, in their prime working years, and seeking full-time employment. Well over half have not completed high school. A significantly larger proportion of the area's unemployed are women than is the case in the labor force as a whole. The median age among unemployed persons is substantially lower than the median age among the remainder of the population 14 years of age and over. These characteristics reflect above all the lack of diversity and general vigor in the area's economy and the particular shortage of jobs for women and new entrants into the labor force.

A Unique Subculture

If there is any characteristic of Southeastern Kentucky which has singular significance for a rehabilitation program it is the existence of a cancerous and potentially dangerous subculture. This malignant growth had its genesis a generation or more ago in the collapse of the Appalachian coal fields and since then has metastasized to the industrial mid-west. At first it was only a nagging annoyance in the heart of the mountains. However, as time went on it began to break down the cohesiveness between the normal societal cells of family and community. Like the savage cell it simulates, it has demanded so much more than its share of available nutrients it is threatening to destroy the host on which it feeds. This illogical and ever-growing phenomenon is the "check-supported" subculture of the southern highlands.

When a man drops from the labor force he finds himself surrounded by others like himself who have learned the art of survival. The native wisdom and the keen wit which enabled their forefathers to come into the mountain wilderness with packs on their backs and create a semi-civilization from near nothingness has enabled them to extract a semi-subsistence income from a number of sources of free money. These men now resigned to living on a

"check", welcome the newly fallen worker and lead him through the sometimes devious routes to obtaining his membership in "the club". Often, a man with a marginal disability will struggle and entertain thoughts of going back to work, but the struggle is usually brief. The last we see of him is his hand reaching up for his first "check", his food stamps, and his medicaid card as he sinks out of sight into the amniotic fluid of the womb-like welfare state. Once he sinks it is not likely he will ever rise again. In this project over 200 disabled miners were referred by U. M. W. A. for services. Not one of the men returned to the second interview and several left before the first interview. Many were in the prime of life. Several had come in only because they thought this was another outlet for poverty funds. We can't condemn these men for hanging on to this "bird in the hand". The bushes are empty. We don't need "to walk a mile in his shoes" to know that his life is a dead-end personal tragedy. Reams of statistics prove it. But, his personal tragedy is minor compared to the total tragedy engulfing the family he supported before the "black lung", the slate fall injury, the low back pain, the psychophysiologic reaction, the slipped disc, or what-not shuffled him out of the mainstream of life. Senator Hansen of Wyoming, speaking to the Senate, October 14, 1968, summed up

the problem when he said:

> "Studies on welfare children show that although most of them remain in school through age 16 or 17, they become more retarded in school ranking in relation to non-welfare children. By the time they reach high school they are too often two or three grades behind. Thus we are perpetuating the welfare cycle. These children are severely handicapped in competing with their peer for jobs or for further education."

The Senator further points out that "family structure seems to be weakening. . . many millions of Americans are being abandoned to hopelessness and nonparticipation in our society . . . the welfare rolls are roaring to unprecedented heights . . . 55 children out of every 1,000 under 18 are receiving AFDC."

These remarks by Senator Hansen are not particularly alarming. They have been said so many times before in the last decade that most people have ceased to respond to them. However, in the Southeastern region of Kentucky we cannot cease to respond. They are not political palavar or journalist exaggerations; they are valid descriptions of the conditions that surround the people employed by the program described in this report and face them daily in their work. Each person, so exposed, is acutely aware of the ominous threat of the increasing hordes of hopeless children infilterating the hollows of Appalachia and clogging health clinics all over the area. They are also acutely aware of the absence of fathers in these clinics

and acutely aware of the relatively young men who lounge in delapidated cars outside while burdened mothers "pack" a whole passel of timid, awkward, unkempt children into the clinics for long waits on crowded benches.

We become increasingly aware that a concerted attack must be made on the problem of the too-early disabilities of these men who have lost all desire to fight, but nevertheless, constitute an army whose increasing ranks can eventually cripple the country without firing the first shot.

The Environment

Dr. Rene Dubos, a biologist at Rockefeller University in New York, and winner of a Lasker Award in Public Health and a Pulitzer Prize, was recently invited to write one of a series of articles introducing "Earth Day." Although he is a biologist, he recognizes those environmental health hazards which go far beyond physical threat. He also subscribes to the recent philosophy of environmental health which views man as continuous with his total environment. He wrote:

> It has been established beyond doubt that environmental influences exert their most profound and lasting effects when they impinge on the organism during the very early phases of its development, both prenatal and postnatal.

> The mind is affected just as much as the body. Mental and emotional attributes can be atrophied, distorted or enhanced by the surroundings in which the mind develops, and by the stimuli to which it has to respond.

Many years ago, Thomas Grey, pointing the way to the romantic period in literature penned these lines in a poem,

Elegy Written in a Country Churchyard

> Full many a gem of purest ray serene,
> The dark unfathomed caves of ocean bear:
> Full many a flower is born to blush unseen
> And waste its sweetness on the desert air,

Dr. Dubos, pointing the way to a new period in environmental literature wrote these lines:

> The potentialities of human beings often remain in a latent unexpressed state. They have a better chance to come to light when the environment provides a wide variety of enriching experiences, especially for the young. If surroundings and ways of life are highly stereotyped, the only components of man's nature that flourish are those fitting the narrow range of prevailing conditions.

Both these writers, through widely separated in time and profession, captured the essence of the threat of environmental stagnation to the development of human potentially.

Dr. Dubos went on in his article to discuss possible events which might lead to the development of effective programs of action for environmental problems. One is the possibility of some "ecological catastrophe that will alarm the public." He then wrote:

> Another, more attractive, possibility is the emergence of a grass-roots movement, powered by romantic emotion as much as by factual knowledge, that will give form and strength to the latent public concern with environmental quality.

Margaret Mead, who has been described and "the world's scrappist anthropologist" is president of the Scientist's Institute for Public Information. She was also invited to write an article for the "Earth Day" series. She wrote:

> ....among human beings, individuality has reached such a high point that each of us, as he or she matures, becomes a special version of the entire environment, almost a separate species in himself or herself.

President Nixon, in his State of the Union message, delivered January 22 of this year said:

> Between now and the year 2000, over 100 million children will be born in the United States. Where they grow up--and how--will more than any one thing measure the quality of American life in these years ahead....

An excerpt from a Staff Report to the Appalachian Regional Commission, January 19, 1970, states:

> At the direction of the President, Congress and the Governors, the first priority attention of the Commission should be focused on the health, educational and environmental problems of the children of Appalachia.

It is from the foregoing comments, observations, and philosophies that we take our license to go beyond the traditional limits of project

reports and emphasize those features of the Appalachian environment which have particular relevance for the project we conducted.

Many people who live outside the Appalachian region, and many who live inside the region but refuse to recognize the pathos of this hollow culture, would agree immediately that the poor do not hurt. Too often, outsiders look at the cluttered, unkempt stage on which these people play out their lives, and assume they lack the sensitivity to feel. This could not be further from the truth. As you work among these people, young and old, you soon discover their almost uncanny closeness with their environment, and their natural poetic capacity to abstract those microscopic bits of beauty from the macroscopic mass of ugliness which surrounds them. A psychologist, giving an intelligence test to a young girl who proved to be "retarded," as measured by the test, asked, "What does this saying mean? One swallow doesn't make a summer." Her answer was, "All of nature would have to wake up and everything turn green. One little bird ain't gonna determine everything." Another "retarded" teenager from a welfare family wrote on a sentence completion test, "Back home is where the trees and hills are pretty." Another high school senior reporting on her only trip outside the county in which she was born (the traditional senior class trip to

Washington) said, "I didn't really like it there. There's so many of them statues there it's like a city of the dead. Back here it's like ... well, like everything's living."

Testing among these young people from Appalachian poverty groups has also revealed that they do indeed know how much they hurt. One child wrote, "sometimes I feel like a motherless child." Another wrote, "I would like to be free from trouble and fears." Another, "my nerves are recked." Another, "My nerves just won't let me go on like this." In the well known Rorschach Ink Blot Test, there is a card on which subjects often see an animal. Time after time, among the poverty families of Appalachia, the animal is seen as a rat. This response is almost never obtained in urban, affluent areas of the country. Yes, the people of Appalachia are sensitive, and it is this sensitivity which offers promise for any approach to alleviating individual suffering.

If our response to the conditions we seek to improve appears emotional, it is because our response is emotional. It is difficult to look closely at this environment without experiencing a marked reaction; it is just as difficult to convey these reactions to others. A group of professionals working in an Appalachian Clinic published an article recently in the International Journal of Social Psychiatry.

In describing homes in coal camp communities they wrote:

> Maintenance as well as construction is usually poor. In the worst-controlled communities the state of disrepair at times runs beyond the power of verbal description or even photographic illustrations. Neither words nor pictures can portray the atmosphere of abandoned dejection or reproduce the smells. Old unpainted boards and .... batten houses going or gone and boards fast falling, roofs broken, porches staggering, steps sagging, a riot of rubbish and a medley of odors--such are the features of the worst camps. They are not by any means in the majority but wherever they exist they are a reproach to industry and a serious matter for such mineworkers and mineworkers' families....

In abandoned coal camp communities, where the mine owners have closed the mine and sold company houses to the jobless miner, conditions are often even worse.

In discussing the miner and his wife these same writers wrote:

> Nutrition and sanitation are like the social situation, retarded and inadequate. Meals are based on a traditional rather than a scientific diet, and made up of food purchased in the company store or the corner grocery where the greater share of the family shopping is done. Concepts about hygiene and matters of health are unknown. Flies move freely through screenless windows from slop piles in the backyard to the sugar bowl on the table. Economically, geographically and psychologically trapped in such a life situation, the hope "that burns eternal in the hearts of men," and makes life worth living, must indeed be but a dying ember in the case of the miner and his wife.

The literature is loaded with documentation of unhealthy and

unsightly environmental conditions in Appalachia. Everything we read, hear about on radio, or see on T.V., we have seen all too frequently in the region covered by this program. We would need several volumes to catalog all the environmental ills, but we will mention only a few.

While we were preparing this report, a television station answered a request from Washington to produce and broadcast a film on local pollution in an Appalachian Community. The television camera crew was able to produce 300 feet of film along 81 miles of public roads without leaving their truck and without trespassing on any private property.

Individual apathy, industrial exploitation, political barriers, and insufficient education results in excessive air, water and surface pollution. Most homes and many schools have inadequate sewage facilities, thousands of pipes discharge raw sewage into streams, hundreds of open dumps breed flies and rats, streams are laden with sediment, sewage, and rubbish, and almost one third of the residents depend on questionable or unsafe water supplies. Due to a shortage of public health personnel and sporadic health regulation enforcement, environmental deterioration continues.

It is the defilement of our water that disturbs us most. Perhaps

this stems from the fact that we depend so much on water to sustain life, or maybe it's because we derive so much pleasure from swimming, boating, and fishing. But, whatever the cause, we are more demoralized by the contamination of our water than by the contamination of any other aspect of our environment. Standing on a bridge, looking down into a dishwater grey river profaned by floating trash, clorox bottles, garbage, and raw sewage, we are reminded of a verse in the Old Testament, Ezra, 9:11 "... The land unto which ye go to possess, is an unclean land with the filthiness of the people of the land, with their abominations, which have filled it from one end to another with their uncleanness."

We could go on listing the abuses of our environment: the crumbling, overflowing privies; flooded septic tank systems; open dumps fouling the region with acrid smoke, noxious odors, and disease laden rats; excessive erosion due to casual mining and construction practices; deteriorating coal camps; dangerous and unhealthy school buildings and equipment, and so on. But, if we continue, we produce a cacophany of catastrophes which can easily drown out all hope of finding any reasonable solution. This would be tragic, because we feel there is a solution. Appalachia is basically beautiful.

In an article in Mountain Life and Work, Harry Caudill describing Appalachia's natural beauty wrote:

> It is doubtful that even the magnificent Great Smokies are lovelier . . . In the spring the forests are gay with incense and bright with millions of wild flowers. In the fall the colors defy description--red, yellow, plum, gold, orange and brown in riotous combinations. Forests, crags, laurel thickets and rushing streams offer healing for the harried soul of every visitor. . . For 5,000 years men have built towns here, and this colorful region grips all who come to know it.

People have always been captivated by its beauty, especially in the spring and fall, when Appalachia, like a gorgeous woman marred by a web of ruptured veins, covers her blemishes with colorful clothes. Even the shacks sometimes take on a quaint look when surrounded by the natural beauty of the land. The streams are low and running slow and the leaves of overhanging bushes cover the toilet tissue shrouds that often drape their lower limbs. At such times of the year a tourist might pass through the region at fifty miles an hour and never see the creeping corruption which poses a serious threat to the health of its residents, and contributes to the cloud of despair that hangs over the hollows like the blue-grey ground fog of a mountain morning.

This despair had its genesis in the rape of Appalachia when

extractive industries began ripping her wealth out of the forests and out of the mine and taking it away, virtually tax free, to invest in more affluent areas. When the cream had been skimmed they withdrew to "America the Beautiful" and left "America the Abandoned." When we consider the wealth which left to be invested outside the region and to provide both state and federal taxes for the other America, we are somewhat embarassed at the modest sum we requested to apply to restoring the people of our land.

The problems are complex, and the time needed to solve them ran out years ago. It is too late for most of the adults. Like the tough old catfish and calloused carp who poke among the "thin pickings" of turbid sewer-like streams, gasping through algae clogged gills for a little more life, thousands of adult males squeeze subsistence for their families from welfare checks and gasp for air to fill their dusty "black lungs" while they sit on sagging porches waiting for the dark. It may be too late for many of the teenagers; their scars are too deep to be covered by environmental cosmetics or antiseptic treatment of their surrounding. But, it may not be too late for the babies and the unborn progeny of these proud mountain men.

In a recent Saturday Review editorial "Cleaning Humanities

Nest" the opening paragraph stated:

> Philosophy precedes ecology. What is most needed today are new realizations about man's place in the universe, a new sense of life, a new pride in the importance of being human, a new anticipation of the enlarged potentialities of mind, a new joyousness in the possibilities for essential human unity, and a new determination to keep this planet from becoming uninhabitable.

The closing paragraph stated:

> If supreme value is given to life, it will not be impossible to create and maintain those institutions that are required to serve and sustain man.

Because we share this philosophy, and because we value the lives of our children, and because we have seen among our people "gems of purest ray serene" and "flowers born to blush unseen" we are convinced we can rekindle the fires of self-respect; we can still the whimpering of our babies who writhe with dysentery, we can stop the rattle of rats in our rafters, and we can replace the stench of fouled air with the floral fragrance of a former Appalachia. We began by strengthening bodies, expanding vision, and restoring hope. The effect of the land upon the people we served was a critical factor, and we believe the effect of these people upon the land will be a critical factor in future efforts aimed at environmental restoration.

The People

Although our program served all types of people, many of

our clients came from the poor, and the chronically ill. It is these people we will focus on here. Like caulking between the polished planks of the "Ship of State," these people are tucked back in the hollows of Appalachia, almost invisible to anyone. There is a stigma attached to infirmity, and once infirmity strikes they are unlikely to venture out. They remain out-of-sight and out-of-mind bearing their personal suffering with a stoical acceptance and an almost unbelievable tolerance for pain. This stoicism was the primary legacy left them by their rugged forefathers who walked into the Region a century and a half ago to hack "stump farm" homesteads from the lush forests of a former Appalachia. Stoicism is about all they have left. The lushness of the land is gone. The desolation which replaced it has been well documented. Harry Caudill wrote the following passage which has particular significance for the peculiar problems faced by our program and any other program which seeks to serve the mountaineer.

> . . . the mountaineer was betrayed countless times. To begin with, he was betrayed by his ancestors who foolishly sold a gigantic wealth of timber and minerals for only a few pennies to the acre, thus effectively disinheriting whole generations. He was betrayed by the timber barons who exploited the forests, with remorseless cupidity, and by the coal corporations which emptied and scarred his hillsides, contaminated his streams with mind acids, polluted his air with sulfurous fumes from burning culm heaps, maimed thousands of workmen and spread multitudes of widows and orphans across the valleys. He was

> betrayed by his politicians who conspired with the great, absentee-owned extractive industries to permit them to withdraw the riches of the mountains without being taxed to provide the schools, libraries, hospitals and other services for which the mountaineers hungered. He was betrayed by the mission schools and colleges which came to educate his children and taught them to leave the region rather than to stand and fight for its development or, in the case of those few who actually remained, failed to inspire them to lead their people in the building of a society worthy of their heritage. And this betrayal is saddest of all, because in county after county the little cadre of lawyers, doctors and politicians who can boast of a college education are generally staunch defenders of the status quo and of those who plunder the region.

This betrayal has not gone unnoticed by the individual Appalachian. It is reflected in his attitudes, his habits, and his whole style of life. Mountaineers share a common distrust of outsiders, and a common dependence on their own people. In 1966, Jack Weller, Director for five years of the West Virginia Mountain Project sponsored by the Presbyterian Churches of America, produced a definitive analysis of the Appalachian personality in "Yesterday's People." In this book, heralded as a classic of contemporary Appalachian literature, he discussed attitudes toward medical care:

> . . . In another area of life, the mountaineer must also go to the outside world for help when serious or prolonged illness strikes. . . The mountain man is resigned to seeing an outside doctor because he is forced to, not because he believes wholeheartedly in the practices of modern medicine. He has a negative attitude toward doctors, hospitals, and the whole process of medical care . . . Because he is an action

> seeker, he seeks medical care only in response to crisis. Little thought is given to preventive medicine or preventive measures. They simply cannot see the value of preventive medicine, even for their children ...Mountain people are often afraid of illness and postpone seeing the doctor for fear he will find something wrong with them. Many of them are frightened of hospitals and are suspicious of hospital care and treatment. Because hospitals must treat persons in an other than person-oriented way, the mountain patient believes that the nurses and doctors and attendants cannot really be caring for them as they should. Thus, members of a patient's family will take turns keeping round-the-clock vigils, to make sure he gets the kind of care he needs and to make sure the doctors and nurses do not try to do something wrong.

This protectiveness reflects the strong ties between family members resulting from marked emotional dependence on, what Weller calls, the mountaineer's reference group. He writes:

> While the social ties of the family are often not strong, being related as they are to the reference groups, the emotional and dependency ties are extremely strong. The death of a family member brings great and, what seems to the casual observer, even exaggerated grief. I have seen adults who for years have shown little concern for their parents break completely at the word that their father or mother is seriously ill or has died. Graveyards (which are often family plots) are kept cleaned off and almost always covered with flowers in remembrance of a loved one .... Both sons and daughters want to settle near their parents, and whole hollows or bottoms have gradually filled up with the houses of kin settling close to each other.

Even when the mountain-man leaves his community, he does not shed his need for family and familiar surroundings. Weller emphasizes this when he writes:

> When middle class persons move from one city to another, as often happens in our mobile culture, they find substitutes for their friends and peers. 'People are much the same wherever you go' is a common phrase. But mountain families do not often say this when they are forced to move, because no one can replace the family in the security pattern. Nor does distance in miles break the psychological dependency ties. Many mountain families who have been living in the city for years would move back to the mountains in a minute if they could be assured of jobs there. The fierce loyalty of mountain people to home is mostly a loyalty to the only culture in which they feel secure and which operates in ways they know and appreciate. For the mountaineer, moving is a kind of death to his way of life. It cuts him off from his sustaining roots.

Nevertheless, thousands of mountaineers died this kind of death. If the "sustaining roots" had also died, we would not face such urgent demands. A critical situation is developing as mountaineers come back to graft themselves to these vestigal roots. The roots are growing again and threatening to choke the available health delivery systems of the seven county region.

This development began a double decade or more ago. Following the callapse of the coal field economy, there was a mass exodus as wave after wave of young and middle-aged men made their way to the industrial midwest searching for something to replace the "16 Tons" which had sustained them until their occupational pillars gave away. They were not gone long before a general filtering back began as young men started to return. Their hopes and dreams for a new life had been exposed as nothing more than cob-webs and moonbeams,

having no substance. They were disillusioned mountain men who never found their niche in the kaleidoscopic complexities of city life, and came home seeking peace of mind. They found instead the all pervading, fatalistic atmosphere they left behind. These men who continue to drift back to the region have always been a problem. But now, as the men who made up the first exodus grow old, a major backwash is beginning, and a mounting tidal wave of older men is flooding the region. They are the "successful" men. They conquered the cities and have come home with sufficient social security to see them through financially. But physically they are spent. And, they are dying.

Appalachia faces the same threat faced by every community in the nation. People are living longer and the number of sick senior citizens is increasing. However, no other region in the country has so many absentee citizens who plan, from the time they leave, to "come back home." Home is never "where you find it" for these peop le. Home is the hollow from which they came. They often own a small hillside plot or maybe a little "bottom", and they never consider the places they may live for 5, 10, or 20 years anything but temporary. The implications are clear. The present need is

critical, but as the men who made up the original exodus from the coal fields return, it will become more critical.

In addition to this unique problem, there are other special conditions which burden health delivery systems in our region. The rate for hypertensive illness is twice that of the national rate. The coal industry, hazardous roads, steep terrain, crumbling foot bridges, small sawmills, farm accidents, gun battles, and fights produce a perpetual parade of serious injuries every year. "Slate-falls" in mines and gunshot wounds result in a high incidence of paraplegia and quadriplegia. Added to the number of mine injuries is the notorious family of lung diseases now coming to public attention. Many of the infirmities mentioned above result in long periods of confinement. Some illnesses are terminal, but many can be cured and the patient rehabilitated. However, rehabilitation efforts in Appalachia face some unique barriers. If there is anything unique about the people we serve it is their need for "medicine with a heart." A frequent result of protracted illness for the mountaineers is bitterness. The stoicism which bolstered them throughout their lives gives way to cynicism toward the end. Death, for far too many mountain men, is a mammoth struggle to assert the masculinity stripped from them by a life-long sense of failure. This struggle is

worse when death is long in coming, but even when death is quick, it will occur.

As we were writing this report, a hospital custodian stopped to talk,and in some way, the conversation turned to death. He told of watching a man die who had been trapped by a "slate-fall." The custodian's comment was, "He died 'cussing' when he should have died praying."

This is a major tragedy of Appalachia; too many men die "cussing" because of the bitterness they feel toward a world they could not understand and a world which could not, or would not, take the time to understand them. Unfortunately, their lamentations echo only in the hollows they call home, and the message they might convey when they release their pent up wrath is nothing but "a cry in the wilderness" affecting only their kin, and their children, and their children's children.

The rehabilitation project can, and does, play a significant role in both reducing their anguish and transmitting their messages to people who care. Our oxygen has given them breath, our catheters have kept open the vital passages of their bodies, and our antibiotics have attacked the bacteria of their festering physical sores. This is good. But, equally important is the fact that our personal attention

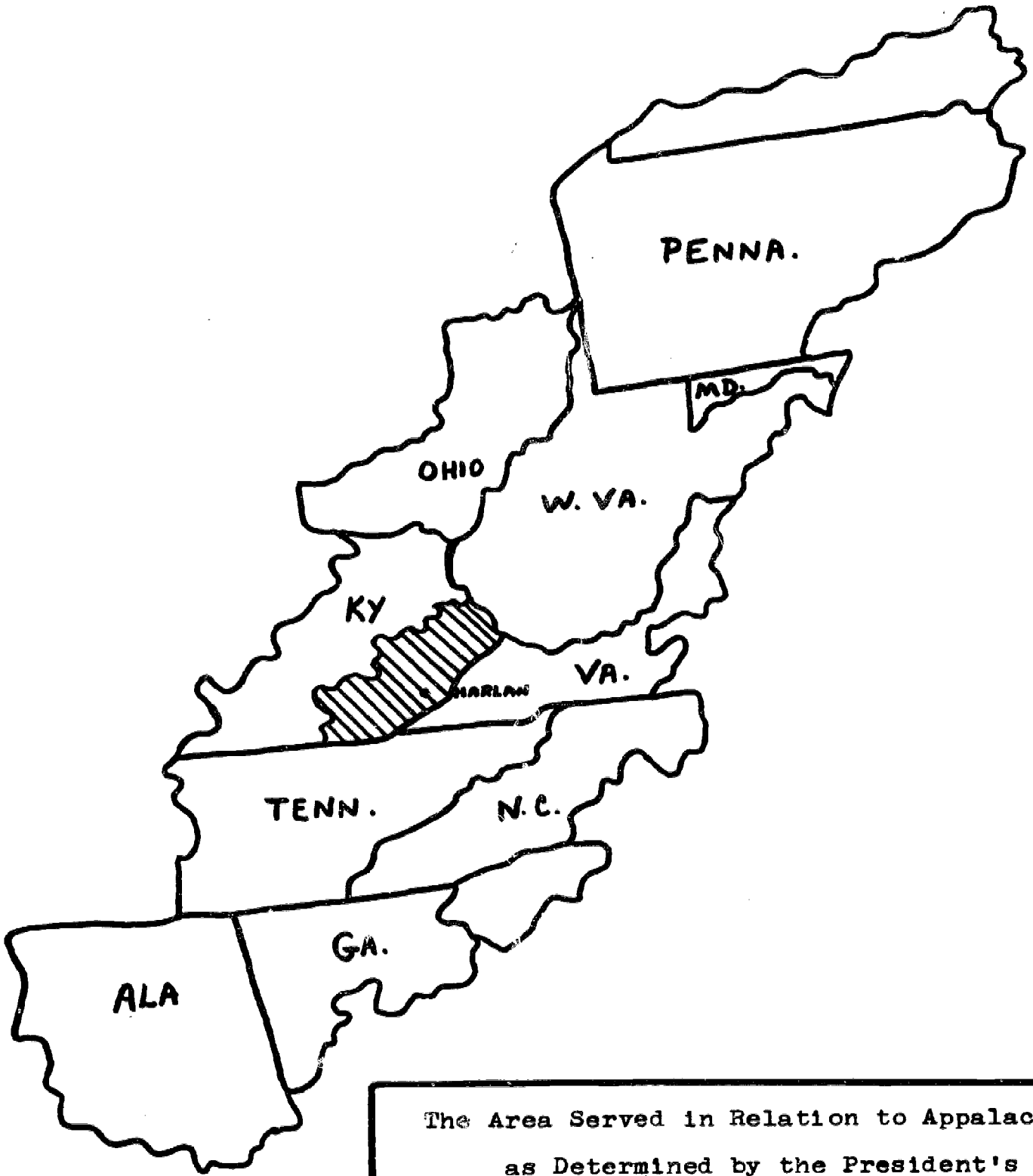
has attacked the bacteria of festering psychological sores.

Our records reveal the numbers of our visits and the number of services we purveyed, and to the extent that we could utilize staff and funds, all quantitative measures document success. But we feel this is not the total measure of our contribution.

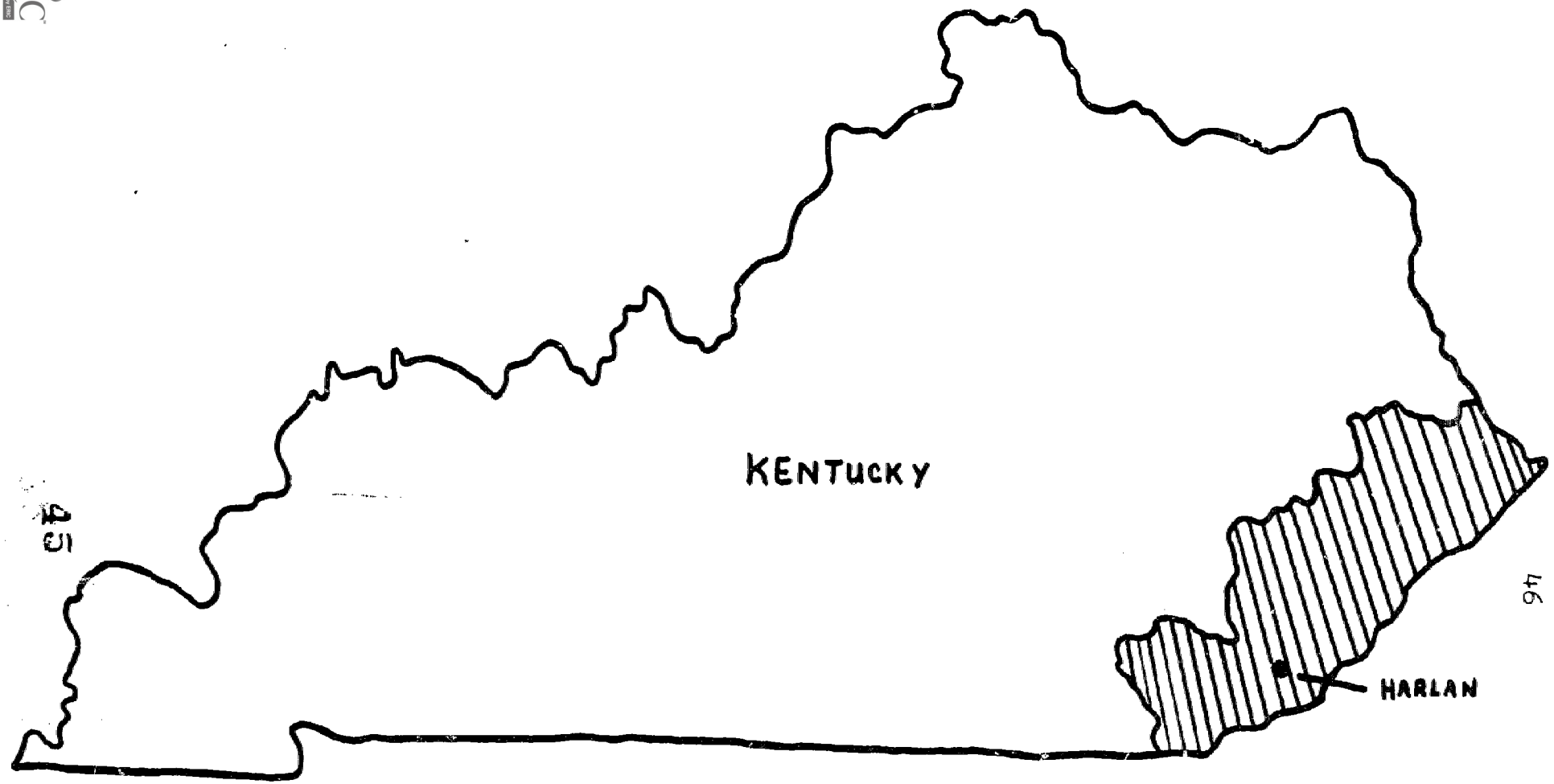
Our experience has convinced us we take far more to these people than physical restoration. We have watched practically mute, unsocialized, and rejected people develop personalities which had been so long submerged in apathy, ignorance and fear; we have seen people who never smiled or showed any emotion for weeks, suddenly blossom into real people as the fear of feeling fell away; we have seen children who had hidden on initial visits come running barefoot down rocky roads to meet our cars; and we have seen cynical, hostile men, at first afraid of leaving a world they could not conquer, leave it finally to us, because we had shown them by our presence that someone cared.

Our services are provided primarily for adults, but we feel certain they have a profound effect on our young as well. Perhaps in some way, we have curtailed the contamination of children in the close confines of crowded hollow homes, who must witness not only disease and death, but also the bitterness, despair, and hopelessness that comes

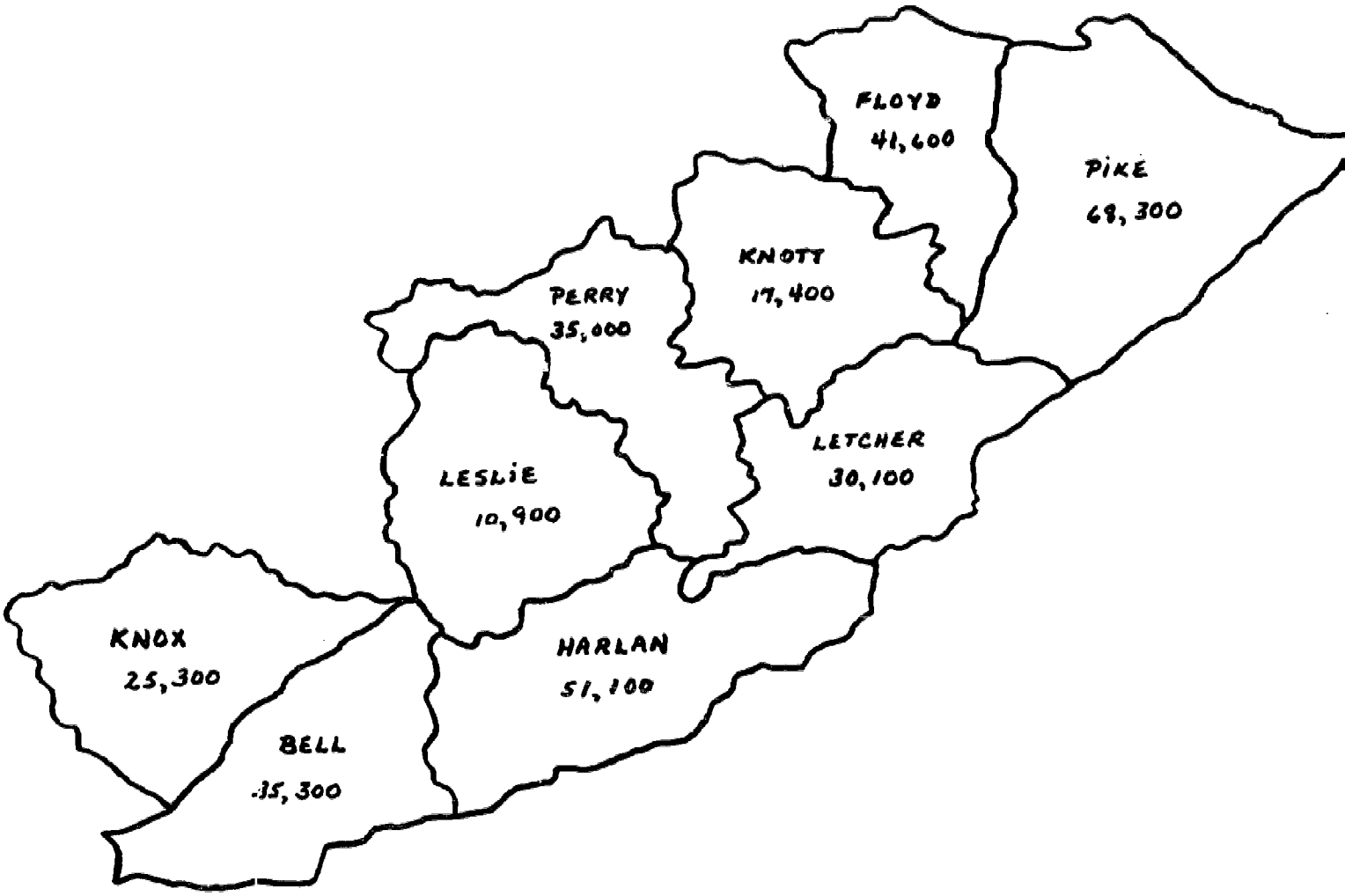
when a betrayed man dies alone, believing no one cares. We have cared and we continue to care. Perhaps this is the most significant contribution we made. We have changed the outlook of at least a few people who "lifted up their eyes unto the hills" for strength and found it.



The Area Served in Relation to Appalachia as Determined by the President's Committee on Appalachia



The Area Served in Relation to Kentucky



Population of the Nine County Region

by County

CHAPTER III

METHODOLOGY

Participating agencies

Two organizations had major roles in implementation of the program:

Appalachian Regional Hospitals, Inc., provided some staff and facilities for the project. ARH consists of a chain of ten hospitals throughout Eastern Kentucky, Western Virginia, and West Virginia which has pioneered efforts to bring comprehensive modern medical services to Appalachia. The Harlan Appalachian Regional Hospital furnished physical and administrative facilities and supplied equivalent to a cash contribution to the program approximating $7,500 annually. The Rehabilitation Project Center was provided separate quarters on the hospital grounds.

Kentucky Bureau of Rehabilitation Services, the co-applicant for V.R.A. Grant No. RD-1642-M, acted through two Rehabilitation Counselors in the RPC in Harlan and in Paintsville to implement rehabilitation services and provide financial assistance to disabled persons who met eligibility requirements for the program

Staff

The rehabilitation team included a physiatrist, two rehabilitation counselors, a social worker, two psychologists, a physical therapist, and an occupational therapist technician with administrative support provided by three secretaries.

The rehabilitation counselors, social workers, secretaries, and occupational therapy technician were all full-time staff. The others were employed part-time on a regular basis. However, the physical therapist was available on a full-time basis for all practical purposes since she was also an employee of the hosptial which paid half of her salary. In addition, a wide variety of medical consultants were available in the hospital and its clinic to provide diagnostic and treatment services.

Procedure

The procedure for intakes, evaluation, and disposition of clients referred to the RPC remained unchanged from procedures introduced at the beginning of the project. Briefly, it conformed to the following outline:

Clients were referred from field rehabilitation counselors, physicians, other agencies, individuals, or the hospitals. The referral was usually accompanied by a case history with a medical report. At this time one of the staff members, either the social worker or the counselor, discussed diagnosis and prognosis with a physician. In some instances he went to the client's home to determine whether or not hospitalization would create a hardship to the family. (When it was found that such hardship would occur, arrangements were made with rural day nurseries, public assistance

agencies or relatives to care for dependent children during a mother's absence from the home, for example.) An examination of the client's record was then made to determine disability. If it was found that the client's disability would prevent or hinder him or her from working or, in the case of a homemaker, from caring for her family, the case was referred to the admissions committee.

A committee composed of the physiatrist, rehabilitation counselor, and social worker reviewed all available records and either accepted the case for evaluation or rejected the case and referred it to the proper resource agency, for example Public Assistance.

The evaluation process could involve one or all of the team members. Their findings were discussed in a staff meeting or in individual conferences between the counselor and the other people involved. Team recommendations were compiled and reported by the counselor.

The counselor closed the case with recommendations for continued care by some other agency, accepted the case and authorized services needed, or judged the client ineligible for services, sometimes with referral to other agencies. When a client was accepted, a plan of action was written by the counselor

which included a statement of the client's disability, indicated how the disability prevented or hindered the client in working, how services would make the client employable, what he or she would be able to do, and what services were indicated. The plan also reported the economic status of the client and specified whether there were other financial resources for medical treatment, whether the client would need financial assistance through a training program, and whether the family would need assistance while the client was receiving treatment or training.

Method of reporting

The method of reporting was essentially the same as for the regular program for rehabilitation services and showed the orderly transition of cases from the time of referral to the time of closure. Regular monthly, quarterly, semi-annual and annual statistical and progress reports indicated the number of referrals received, cases deemed eligible, cases accepted for service and activities of the project during the reporting period. Forms regularly used for such a report are the state standard R-100, KVR-990, KVR-99, KVRS-100, etc. When clients were referred to the Rehabilitation Project Center by other agencies, written requests were sent to those agencies for complete medical, psychological, social and vocational information to be used by the staff team in making a vocational evaluation.

Special Services

The following specific services were provided project clients:

1. Rehabilitation Evaluation

Disabled persons referred to the project were given a comprehensive evaluation--medical, social, psychological, and vocational. This evaluation was carried out in the Rehabilitation Department of the Harlan Appalachian Regional Hospital or in the Appalachian Regional Hospitals at McDowell or South Williamson. This process involved the services of the project staff medical director, vocational counselor, psychologist, social worker--and such additional consultants as were needed and available. This was the first instance in which comprehensive rehabilitation evaluation services were made available to severely disabled persons in this mountain area.

2. Rehabilitation Treatment

Disabled persons found through the evaluation process described above to have potential for employment through any of the modalities of rehabilitation medicine received appropriate treatment in the Rehabilitation Departments of the hospitals at Harlan, McDowell, or South Williamson or were sent to more specialized treatment centers. These treatment services included physical therapy, occupational therapy, drug therapy, and conservative medical treatment and health care. All available resources for financing medical care were identified and brought within the scope of the project. These included

the State rehabilitation agency, the medical care program of the State welfare agency, the United Mine Workers of American Welfare and Retirement Fund, private insurance, and family resources. Rehabilitation treatment financed from project funds was handled through the State rehabilitation agency, co-sponsor of this project, and was limited to those persons thought to have potential for employment in some form of gainful activity.

3. Vocational Counseling and Planning

The project rehabilitation counselors, supported by the State agency's local office counseling staff, rendered the vocational counseling services as required by project clients throughout the rehabilitation process.

4. Psychological Services

Psychological Associates, Ltd. of Lexington, Kentucky, furnished consultants to provide evaluation services, psychological testing and therapeutic counseling for project clients requiring such services.

5. Social Services

The project social worker identified significant personal and family problems that affected rehabilitation outcomes.

6. Vocational Training

The services of the local vocational school were important in the vocational training of project clients. This training was financed by the rehabilitation agency. In addition, the various work stations of the Hospital and Medical Center and the resources of community industrial and business establishments were utilized to provide on-the-job training for selected clients.

7. Remedial Education

To improve motivation, trainability, and employability of project clients, a general program of remedial education was organized. This was located at the vocational school and sought to meet the basic educational needs of illiterates and near illiterates and the related educational needs of those whose general educational deficiency limited their ability to profit from existing vocational training courses.

8. Sheltered Workshop Services

In cooperation with a selected demonstration project for the retarded operating in the Harlan community, a sheltered workshop was developed to provide additional resources for the evaluation, training, and employment of severely limited persons.

9. Placement Services

While it is recognized that many clients served in this project did not improve sufficiently to become employable, a substantial

number did do so. The project counselors, assisted by other rehabilitation counselors in the area, developed job opportunities for the disabled in the various communities within the project area and helped individual clients find suitable placements. This included competitive employment, sheltered employment, and small business enterprises.

Changes in Methodology

During the last two years of the project the team approach was more-or-less abandoned. This resulted from a marked increase in referrals from the hospital. Many people with obvious disabilities and no personal funds deluged the hospital and clinics. In addition, new comprehensive health programs were developing throughout the area and some overlap in services was occurring.

With the exception of disbanding the "team" all procedures described in this chapter continued through out the five year project period.

CHAPTER IV

RESULTS

During the five year life of this demonstration project, 1,977 persons were referred for rehabilitation services. (Table X, page 75.) Table I shows that 57% came from Harlan County. Together, Letcher, Perry, Bell, Leslie, Knott, and Knox accounted for another 39% of the referrals. Although referrals were received from eight more counties, these referrals represented only 4% of the total.

In the course of the project, a number of studies were made to determine population characteristics and differences between various subgroups such as "accepted versus not accepted" and "closed versus not closed" cases. For the purpose of this final report, we will review results of the studies we consider most representative of the total project. We felt this would be more meaningful than an analysis of the entire population served in view of the change in thrust of the project during the last two years. During the 1966-67 period, an intensive study was made of 500 closed cases. The following questions and answers illustrate the most significant findings:

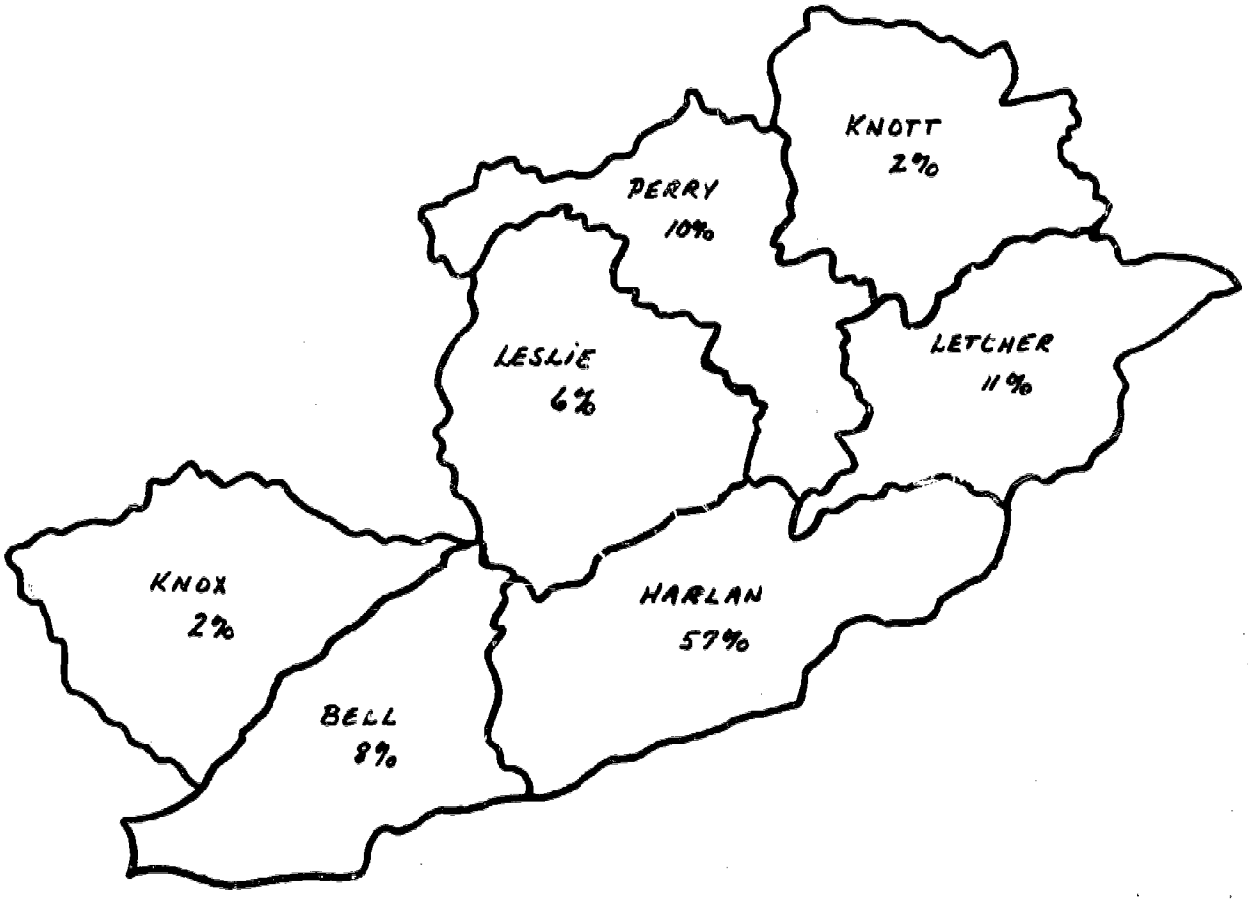
1. What percent of the total 500 referrals fall into the following four

TABLE I

DISTRIBUTION OF CLIENTS

BY COUNTY

COUNTY	CLIENTS
Harlan	57%
Letcher	11%
Perry	10%
Bell	8%
Leslie	6%
Knott	2%
Knox	2%
Clay	1%
Breathitt	.5%
Floyd	.5%
Whitley	.4%
Laurel	.3%
Pike	.2%
Owsley	.09%
Pulaski	.09%



Percent of Clients from each County

The remaining 4% came from outside this seven county region

categories?

(a) Referrals not keeping appointments

(b) Referrals keeping appointments but not following through

(c) Referrals evaluated but closed with no rehabilitation services

(d) Referrals receiving rehabilitation services

It was found that 7 percent of the referrals did not keep their appointments, 26 percent kept their appointments but did not follow through, 38 percent were evaluated but received no services, and 26 percent received services.

2. Are there any broad differences between referrals who receive service and those who do not receive services?

The most outstanding difference is that women far outnumber men in receiving BRS services. Of the group who did not keep appointments, did not follow through, or were evaluated and closed, 74 percent were males. Of the group who received services only 25 percent were males. Other significant findings from the study were as follows:

(a) Of the total number of clients referred from the more distant counties 41 percent received services. However, of the total number of clients from Harlan and adjacent counties only 27 percent received services.

(b) The mean educational level of referrals not keeping appointments

was 10.22 years. The mean educational level of referrals receiving services was only 6.78 years.

(c) The mean age of referrals not keeping appointments was 45.4 years, for referrals not following through 45.8 years, but for those receiving services it was only 39.2 years.

(d) Ninety-one percent of the women receiving BRS services were homemakers at the time services were received. Only 3 of the 36 males were skilled workers, and of the 33 other males, 16 were listed as unemployed at the time services were received. Of the total, male and female, only 26 out of 139 were employed at the time services were received.

It is significant that only 4 of the total of 139 were unemployed miners and only 2 were listed as employed miners. Since this is a mining community with a large percentage of its unemployed and disabled being miners or former miners, we would expect far more than 6 out of 139 clients receiving services to be miners.

(e) Of 130 clients referred by UMWA only 30 were evaluated and none of the 130 received services. It would appear that referrals from this source either did not need or did not want services.

The following significant trends were noted during the 1966-67 period in which the study of 500 closed cases was made:

Trends in Referral Source:

During the first two years of the project clients came from a wide variety of referral sources. Some of these sources referred large numbers of clients who did not receive services. This resulted in a large case load but a low percentage of rehabilitated cases. More recently, most referrals have come directly from the hospital. The effects of this change are that only 51 percent of the clients placed in operational status during the last project year were subsequently accepted for services, while during this year, 81 percent of those placed in operational status were accepted for service. The effect is equally apparent when total clients available and total rehabilitated are compared. Last year only 23 percent of the total clients available (including clients on hand at the beginning of the period) were closed and rehabilitated. During this year 42 percent of the total clients were rehabilitated.

Trends in Geographical Source:

The range of counties served has narrowed since last year when clients arrived at the center from 16 different counties. During the 1966-67 period only six counties are represented. It should be noted, however, that a vast majority came from Harlan county. In 1966, 60 percent came from Harlan county; in 1967 it was 68 percent.

Trends in Type of Disability:

There has been no significant change in primary disability

of rehabilitated clients. Accident or injury accounts for approximately 10% of the disabilities. This is consistent with findings in the Research sample of 500 closed cases. Benign unspecified neoplasms, ulcers of stomach and duodenum, and conditions of the genito-urinary system still account for most of the disabilities.

The study completed on the 1967-68 project reflected the changes that took place when the basic structure of the project changed from an outreach, referral seeking, training, team approach to a hospital oriented physical restoration approach.

Table II shows a significant increase in both accepted and closed cases.

Table III shows an increase in the percentage of funds expended for hospitalization, surgery, and medical treatment and a significant decrease in funds expended for training.

Table IV shows an increase in the number of clients not receiving services due to ineligibility but in terms of percentage referrals the difference is not remarkable. Most clients referred to the RPC fell into the 40-49 age range, with the median age for the group 39.5. As in previous years, the number of women seeking services was greater than the number of men. Figures showing distribution of clients by age and sex are reported in Tables V and VI.

Table VII shows the geographical distribution of clients referred

for services. Again, most of the clients come from the counties in which Appalachian Regional Hospitals are located.

Table VIII reflects a significant increase in conditions of the genito-urinary tract as the most frequent disabling condition.

The most remarkable change resulting from a shift in emphasis in the program is revealed in Table IX. In the 1965-66 period, 266 clients were closed not certified; in the 1967-68 period only 68 were closed not certified.

A random sample of 100 closed-rehabilitated cases taken from the total number of cases handled during the five year project period indicates a client accepted and closed-rehabilitated is most likely to be a married, 39 year old, white housewife with an 8th grade education and a disorder of either the digestive system or the genito-urinary system. After "rehabilitation", she will most likely return to being a housewife. Not all cases, however, fall into this category. On the following pages are some case histories which better represent the true mission of vocational rehabilitation.

Finally, Table X summarizes movement of clients through the program during the entire five year period in which it was in operation.

CASE HISTORIES

Raw statistical data rarely presents a complete picture of what happens in a complex, service oriented program. This is particularly true in the present demonstration project, since it takes place in a unique region. The region's uniqueness stems, not from the type of disability nor the method of treatment, but from the social and economic factors intermingled with almost every disability. To be disabled in an urban community, surrounded by all modern services and conveniences is one thing; to be disabled in an environment which places unusual strains on even the able-bodied person is a radically different thing. The following brief histories will illustrate this characteristic found in most cases served by the Rehabilitation Project Center.

A Housewife:

This client is a 30 year old married woman with seven children who range in age from one to eight years old. She has only a ninth grade education and no work experience. Her husband was an unemployed miner until he went on the Work Education Program (Happy Pappy Program) a year ago. The family lives in a rented, four room, frame house approximately three miles from Hazard, Kentucky, in a rural area. The house has no indoor plumbing and since the family has no car, they must depend on neighbors for transportation. When

this woman was referred to the Rehabilitation Project Center she had been suffering with a hernia for three years and had been unable to care for her family. After referral, she received successful surgery and is now able to take care of her seven children and her husband.

A Working Mother:

Another typical client is a 41 year old woman who has two children and a totally disabled husband. This woman has only an eighth grade education and was working as a kitchen helper. However, she began to experience severe abdominal pains and was forced to quit work. She was referred to the Rehabilitation Project Center because she was unable to care for her family or engage in competitive labor. After she received surgery, including a hysterectomy, she returned to work and is now earning $238.00 per month.

An Unemployed Father:

This client is perhaps most typical of male clients referred for services. He is a 28 year old man, married with one stepchild. He has only a sixth grade education, has been a miner all his life, and possesses no other occupational skills. Two years before he was referred to the Rehabilitation Project Center he developed a hernia and was forced to quit work. This family lives in a rented four room house located in an abandoned mining camp. He had no insurance and

no income at the time he was referred. After surgery, which was made available through the Rehabilitation Project Center, he was able to obtain a job and is now employed as a mining machine operator drawing $360.00 per month.

A Disabled Clerk-Stenographer:

Vonda B. is a 32 year old wife and mother whose husband was disabled several years ago when he broke his back. She has been the major support of her family since that time working as a clerk-stenographer for the state. She was able to earn about $280.00 per month. She was referred to the RPC with a diagnosis of carcinoma of the cervix. Prognosis for recovery was good is she could be operated on immediately. Mrs. B. was accepted as a client and the costs of her operation and post-operative care paid by the Center. Since she returned to work in her old job she has not missed any time and her mental state as well as her physical state is much improved.

A World War II Veteran.

Arthur H. is a 58 year old veteran of World War II who had worked as stock keeper for a local firm since 1944. Although he had been troubled by ulcers for a number of years, he became acutely ill this fall and had to quit work. Since he had no financial resources to pay for the operation he needed, the Center accepted him as a client. This client was also able to return to his former employer -- who also

benefited, incidentally, since he got back a valuable employee.

A College Student:

Dorothy F. had been self conscious about her eyes since early childhood, but it was not until her junior year in college that she began having serious difficulty with her vision. A medical examination indicated that her eyes could be straightened and that the operation would also improve vision in both eyes. Shortly before the client was accepted for services, she was also faced with the necessity of withdrawing from college for awhile because her widowed mother could not raise the money for her final year in school. Dorothy was majoring in education and hoped to become an elementary school teacher, but she had no other special work skills. The RPC paid for Dorothy's operation and assisted her in her final year in school. She is now teaching in a school in Kentucky. Not only her vision but her appearance was greatly improved by the operation and her increased self-confidence makes her a better teacher.

TABLE II

Movement of Clients Through the Program
July 1, 1967 - January 31, 1968

Compared to

July 1, 1966 - January 31, 1967

Applicants	7/1/66 - 1/31/67	7/1/67 - 1/31/68
Cases in operational status	149	290
Cases accepted for service	116	185
Closed, not certified	31	68
Pending eligibility	2	37
Active and Closed Cases		
Cases on hand as of July 1	77	114
Cases accepted after July 1	116	185
Total cases available	193	299
Cases Rehabilitated (closed)	82	109
Cases not rehabilitated (closed)	7	8
Total closed	89	117
Active Cases Still Receiving Services	104	182

TABLE III

Cost of Special Services

July 1, 1966 - January 31, 1967			July 1, 1967 - January 31, 1968		
Service	Number of Clients	Cost	Service	Number of Clients	Cost
Hospitalization	86	$21,468.93	Hospitalization	198	$50,977.39
Physical Therapy	8	254.50	Physical Therapy	8	1,123.00
Surgery	58	10,855.00	Surgery	158	28,133.75
Medical Treatment	54	1,327.13	Medical Treatment	189	5,307.06
Training	14	7,468.60	Training	25	6,984.38
Appliance	22	1,328.02	Appliance	23	1,827.15
Transportation	2	30.40	Transportation	6	190.98
	244*	$42,732.58		607*	$94,543.71

Average Cost Per Client, 1966-1967 $385.63

Average Cost Per Client, 1967-1968 $241.79

*Total greater than total number served during this period because some clients received services under two or more categories.

TABLE IV

Referrals Not Receiving Services Due to Ineligibility

Reason	July 1, 1966 - January 31, 1967	July 1, 1967 - January 31, 1968
Unable to Contact	1	4
Handicap too Severe	8	8
Refused Service	4	9
No Disability	4	16
No Vocational Handicap	12	16
Other	2	17
	31	70

TABLE V

Client Breakdown as to Sex (Referrals)
July 1, 1967 - January 31, 1968

Sex	Number of Clients
Male	104
Female	174
Total	278

TABLE VI

Client Breakdown as to Age (Referrals)

Age Range	Number of Clients
Teens	31
20 - 29	50
30 - 39	58
40 - 49	64
50 - 59	57
60 - 64	18
	278

TABLE VII

Home Counties of Clients Referred For Services

July 1, 1967 to January 31, 1968

County	Number of Clients
Harlan (Site of RPC)	132
Perry	49
Bell	38
Letcher	36
Leslie	13
Breathitt	3
Knott	5
Pike	1
Laurel	1
Floyd	2
Whitley	1
Clay	1
Total	282
Total Outside Harlan	150

TABLE VIII

Most Common Disabling Conditions As Per Referrals

July 1, 1967 - January 31, 1968

Code	Nature of Illness	Number of Cases
399	Accidents, Injuries, Poisonings	14
609	Benign and Unspecified Neoplasms	6
646	Varicose Veins and Hemorrhoids	13
661	Ulcer of Stomach and Duodenum	8
663	Hernia	8
670	Conditions of genito-urinary tract	33
699	Other disabling Conditions and Diseases	20

TABLE IX

Movement of Clients Through The Program
July 1, 1965 thru January 31, 1966
Compared to
July 1, 1967 thru January 31, 1968

Applicants	7/1/65 - 1/31/66	7/1/67 - 1/31/68
Placed in operational status	312	290
Accepted for services	159	185
Closed, not certified	266	68
Awaiting decision of eligibility	59	37
Active and Closed Cases		
On hand July 1	26	114
Accepted after July 1	159	185
Total Available	185	299
Closed, rehabilitated	42	109
Closed, not rehabilitated	5	8
Total Closed	47	117
Active Cases Still Receiving Services	138	182

TABLE X

Movement of Clients Through the Program
July 1, 1964 - June 30, 1969

Counselor/ Year	Referred	Accepted for Services	Rehabilitated
(Souleyret)			
1964 - 65	145	65	34
1965 - 66	424	202	125
1966 - 67	286	207	159
1967 - 68	396	255	202
1968 - 69	355	218	171
(Gillem)			
1964 - 65	19	15	10
1965 - 66	92	74	34
1966 - 67	108	76	63
1967 - 68	83	62	89
1968 - 69	69	63	67
Totals	1977	1237	954

CHAPTER V

DISCUSSION

If a research or demonstration effort is to be of any real value, it must break new ground or yield new insights. In the present project we were not dealing with tightly planned research. The demonstration was set up to exlore hypotheses of a general sort. That is, it involved an exploratory effort that did not lend itself to tight experimental control, and no attempt was made to institute such controls. Instead, general objectives were specified and the most logical procedures for realizing those objectives were planned. Such plans and procedures represent an ideal, an "ideal" which must be compared with the "actual" in order to determine the real worth of any demonstration project. To make this comparison in the present project we will examine the objectives and the outcomes, and in doing so, attempt to answer this question: Was the whole experience worth while?

Project Objectives

Did the Demonstration "develop a resource for providing comprehensive rehabilitation services to disabled persons requiring such services and living in economically depressed Appalachia?" The answer to this is an unequivocal "yes." In a very short time the Rehabilitation Project Center was established, staffed, and accepting clients. Liaison

was established with sources of both public and private support, and procedures for obtaining all necessary ancillary services were functional.

Did the Demonstration "increase substantially the number of severely disabled persons served and rehabilitated in this demonstration area?" Again, the answer is an emphatic, "yes." During the first three years of the project the intensive "team" approach made possible the diagnosis and treatment of many complex cases which would have been bypassed in a general rehabilitation program. The most significant factor contributing to this success was the availability of all diagnostic services on a regular basis and in a single location. As we mentioned earlier, the difficulties of travel in the area comprise a substantial barrier to the utilization of health services. This barrier was overcome by scheduling clients needing multiple examinations in such a way as to complete a rehabilitation evaluation during a single visit. For the paraplegic or the multiple handicapped client, this was especially helpful. Under the best conditions, travel for these people is not only arduous but often painful. Every effort was made to alleviate the strains they usually encounter by tight scheduling, and when it was necessary for them to spend more than a single day in the evaluation process, we were able to admit them to the hospital. The fact that we were able to reduce the frustrations often endured in dealing with public

agencies was responsible for the acceptance and closure of many cases which would otherwise have fallen by the wayside.

The general suspiciousness on the part of many mountain people often results in a client escaping from the system before all necessary steps are completed. The smooth transition we were able to effect passed the client rapidly from one stage to the next with little opportunity to "slip out the side door" as his anxiety mounted.

Another factor which contributed to our success in terms of numbers was the location of our facility at the Harlan Appalachian Regional Hospital. In addition to the fact that Harlan is the hub of a natural trade area, the hospital is a "John L. Lewis" memorial and familiar to all residents of the area. Motivation to seek medical help is very low and the simple impediment of an unfamiliar address, especially for people who can't read, becomes a monumental obstacle.

During the latter years of the project when most referrals were picked up from hospital admission applicants with obvious physical disabilities, the procedures had been well developed. As a result the numbers increased as a function of increased efficiency.

That we were able to "increase substantially" the number of people served is reflected in the annual reports. The original proposal projected 60 "accepted" cases for the first year of the project and 100 for the second. The projections were exceeded for both years.

In fact, the actual number of accepted cases during the second year was more than twice the projected ideal.

A decided increase in numbers resulted when services of the Center were extended to serve three additional hospitals, in Hazard (Perry County), Whitesburg (Letcher), and Middlesboro (Bell). These hospitals were visited twice each month by either the project counselor or social worker. Since each hospital was staffed by specialists in a number of medical areas, it was possible for clients to be evaluated promptly to determine eligibility for services. Often it was also possible for him to receive treatment, as well, without leaving his immediate community.

Did the Demonstration "promote a community rehabilitation program which brings modalities of rehabilitation evaluation and treatment into an area in which such services are conspicuously absent?" The foregoing comments, as well as the procedures and services described in Chapter III of this paper, show the extent to which this objective was accomplished. The major contribution this project made was not in "bringing modalities of rehabilitation evaluation into the area;" many of these modalities were already present in the area. However, due to the unique characteristics of both the people and the region, these services, for all practical purposes, were "conspicuously absent." We functioned primarily as a catalyst; if we had not been present the

services available and the people needing the services would never have been brought together. When a dead chestnut tree crashes to the earth on a remote ridge of Pine Mountain when no one is within hearing range, there is no sound. Had we not brought these clients within range, there would have been potential for service but there would have been no actual service. We should add here that achieving geographical nearness is not always enough. In many cases, the primary accomplishment was effecting sufficient psychological nearness to result in a successful merging of the service and the client.

Although we consider our role as catalyst the major contribution, we do not underestimate the importance of specific professional skills we "imported" to complete our evaluation team. A physiatrist from Knoxville, Tennessee, and two psychologists from Lexington, Kentucky, provided scheduled services which were crucial to the project and not otherwise available in the area. Although both traveled more than a hundred miles in all weather conditions to participate, it was never necessary to cancel and appointment or reschedule a client.

Did the Demonstration "serve as a pilot area in the typical 'depressed area' community to demonstrate the potential contribution of a comprehensive rehabilitation services program in solving the problems of each disadvantaged community?" Reference to Appendix A will establish beyond doubt that the area served is a "typical depressed area,"

and the above discussion, concerning the first three general objectives, establishes the value of a "comprehensive" rehabilitation service to a disadvantaged community.

Other, more specific objectives, outlined in the original proposal, have been satisfied by this project. The numbers of clients accepted and rehabilitated during the past five years is evidence of the "effectiveness of modern rehabilitation procedures in a depressed, isolated, mountainous area." The success of the program in terms of numbers also demonstrated the effectiveness of combining the services of the hospital, the State Rehabilitation Agency and other community resources in "locating, evaluating, treating, and placing disabled persons in the project area." Chapter II of this paper reveals the extent to which we have become involved in the community, and the depth we have been able to achieve in "identifying the special problems that must be met in a depressed area." Our particular role offers opportunities for insight not offered by other aid programs in Appalachia. Most agencies treat symptoms, or provide direct monies to people who will not be expected to alter their life style as a result of their interaction with the agency. Other agencies or organizations ask the people to change their life style but offer them nothing more than moral support in making the change. However, we not only encourage them to change, but we also offer them the medical, financial, educational, and emotional support necessary to effect a change.

As a result we come closer than anyone to discovering the true nature of the people. The expertise our client might have acquired as a member of the "check supported subculture" is of little use in handling our offer to provide a training stipend at vocational school. A 38 year old's protest that a low-back pain prevents him from working will become increasingly feeble as we move him into physical therapy and begin to convince him that 38 is too young to cash in his chips and not too old to start a new life that will not only relieve the pressure on his spine but also enable him to hold his head high among other working husbands and fathers.

Perhaps this objective (to identify special problems) and the related objective (to collect data concerning the nature of the population) were the most important and the most fully realized objectives. In our opinion, at least, the fulfillment of these objectives contributed most to this becoming a meaningful experience for all who participated.

These objectives take their importance from the fact that they focused attention on conditions which, although well known to all people working in the area, are often ignored or "taken in stride," with little consideration being given to possible solutions. This is not to imply that the service workers in the region are indifferent to its problems. On the contrary, they are much concerned, but many of these problems, especially those so closely tied to cultural and subcultural attitudes,

are so formidable and so well ingrained as to defy resolution within the framework of existing funds and facilities, and personnel.

Vocational rehabilitation has carried out an effective program for years in spite of the fact that the program was being conducted in an environment which was essentially hostile and resistant to even the "idea" of rehabilitation. However, the need for their services has been so great as to preclude the possibility of doing more than meeting the press of everyday demands.

The demonstration project helped in two ways to bring core problems to the surface. First it resulted in the institution of a referral system which reached far beyond the land-locked community of Harlan proper to pluck from hidden hollows the clients who epitomized the basic obstructions to a normal rehabilitative process in Appalachia. And second, it provided the VR counselor with a wealth of information and experience. His close working association with the hospital and other community resources served to enhance his own knowledge of the area, the people, and the unique characteristics of both.

The following factors, highlighted by this demonstration project, should be considered in practical planning for any rehabilitation program in Appalachia:

1. A large majority of the clients referred for services will be

homemakers or persons without any job prospects in the area. Their primary need at the time of referral will be for physical restoration. When physical restoration has been effected the homemakers will remain homemakers and unemployed persons will remain unemployed if they remain in the area. To counteract this condition we would suggest that future plans for rehabilitation include provisions for job placement specialists. These specialists would not be stationed in the immediate area of the project. Instead, they would be stationed in large cities to act as liaison between VR counselors and industry. Another possibility would be a cooperative project between the Bureau of Rehabilitation Services, and the Employment Service. The latter would provide personnel in high employment areas to work directly with the demonstration project. Unless rehabilitation can demonstrate, in this environment, its ability to provide jobs for the jobless it will eventually be perceived by the pessimistic population it seeks to serve, as just another welfare agency -- an agency which can give you back a strong right arm but can offer you no opportunity to use your new strength -- an agency which can give you back your eyesight, but can offer you no vision beyond the narrow horizons of the poverty pocket in which you live.

Although this present project realized its primary and secondary objectives, it reached a point, especially during the last two years,

where it was falling short of the philosophical ideal in regard to rehabilitation. In fact, toward the end it was in danger of becoming nothing more than a source of third party payments for the hospital and the clinic. Physical restoration rather than vocational rehabilitation became the primary end product of its activities. It could be argued that this is the responsibility of medical aid programs like Medicare and not the responsibility of the Bureau of Rehabilitation Services. Mr. Ben Coffman, Assistant Superintendent for Rehabilitation Services in Kentucky, has said, "Every person is entitled to health, education, welfare, and the right to work." The rehabilitation worker's responsibility is to do all he can to provide this last right, the right to work. If a program develops into a vehicle which does little more than dispense funds for medicine, it has lost its character as a mechanism for true rehabilitation.

To avoid the possibility of this contingency, especially when a program is conducted in Appalachia where the need for medicine far exceeds capacity of available health delivery systems and where family resources for medicine are practically nil, we would recommend that special attention be given to contractural arrangements with cooperating facilities. Whether the contract is with another agency, a private non-profit clinic or a hospital, every effort should be made to assure complete autonomy for the rehabilitation counselor and complete free-

dom in decisions concerning how the monies will be applied to meeting area needs. Oftentimes a conflict in policy can reduce the rehabilitation worker to the role of a paper shuffler with almost no opportunity to exercise his expertise as a counselor or a job placement specialist.

2. Many clients referred by public assistance, Social Security, or United Mine Workers of America will decline services. A majority of the cases which were closed-not accepted were closed because they declined services and gave no reason for doing so. The real reason, almost never admitted by the client, is that he is afraid of financial loss. Unfortunately his or her fear is realistic. Many jobs available in the areas do not pay as much for a full-time job as the client can receive through public assistance. Also, public assistance, in addition to such fringe benefits as free medical services, offers more certainty than a regular job. Welfare or disability benefit recipients do not need to worry about being laid off, transferred or fired. Even when a job can offer more money, the recipient may cling to his welfare check. In a county where 17,000 employable people are unemployed, it is difficult to argue with the recipients desire to remain on public assistance. It should be recognized that most of them have crawled on their knees in coal mines for as long as twenty years only to crawl out one day and be told that they and all

their neighbors no longer have jobs; the mine is closed. Since that day there have been no real opportunities in Appalachia. These conditions must be considered in practical planning for rehabilitation, but there is little the rehabilitation counselor can do to combat them. Not all clients choose to remain recipients. But, until more jobs are made available by the influx of industry, optimism must be tempered with realism in planning for the rehabilitation of anyone who is receiving a monthly check in Applachia.

3. There is a tendency for older, rather than younger family members to be referred for rehabilitation services. This is often due to the fact that the older family member has the pressing or the more obvious need. Unfortunately, however, he usually has the least promising potential. In many families, younger members have suffered illnesses which would entitle them to rehabilitation services. Also, deprived living conditions and isolation have often been so severe as to retard intellectual development, with the result that many if not all the family members would qualify for services through special programs for the mentally handicapped.

We would suggest that future planning provide for more intensive concentration on whole family units rather than on the most severe or obvious handicap of individual members. We would further suggest that more systematic use be made of psychological testing in order to

uncover problems of mental retardation or emotional illness.

4. Emphasis in a program tends to be on physical disabilities to the exclusion of mental or emotional disabilities. It is this category, however, that offers the greatest possibility for rehabilitation as well as the greatest threat to future expansion of welfare rolls. We would suggest emphasis on this category by the increased use of psychological screening, vocational testing, and workshop evaluation. When the limit on payments for on-the-job training payments was $60.00 per month it was difficult to place clients in such situations. However, since the limit has been more than doubled for training in skilled and semi-skilled jobs, this method for placing young handicapped clients has significant potential.

5. While most of America is "success oriented," Appalachia, especially for its welfare subculture, is "failure oriented." The result is that motivation is often lacking, even in the young person. For this reason it is important that future planning make provision for more intensive counseling, including individual and group psychotherapy sessions to be provided by professional mental health practitioners. Resistance to change becomes an integral characteristic of a people so long deprived and so surrounded by poverty. It will take more than a brief initial interview to convince many of the clients that they have the capacity to take a productive role in society.

6. It should be recognized that in Appalachia there are two basic categories of people among the poor, those who are hopeless, helpless, and devoid of potential for self-help, and those who have the capacity to rise above the circumstances which surround them. Unfortunately the two groups are so intermingled it is difficult to separate them. If no effort is made to separate them, those with potential for development tend to become more hopeless and eventually helpless for all practical purposes. During the first few years of the project, when a truly comprehensive evaluation team was operational, we feel we were able to identify a number of people with potential for self-help and prevent them from being "sentenced" to life on welfare. We have no way of knowing, but we strongly suspect, that some non-working people with potential "slipped by us" during the last two years. We would recommend that any program located in Appalachia contain, as an integral and necessary part of the procedures, some provision for detecting employment potential in all clients who pass through the system. This should not be limited to occasional examinations but should be a fixed procedure without which an evaluation would not be considered complete. An essential sameness in these people who use each other as their primary reference group often results in hiding potential from the casual observer and oftentimes the astute interviewer.

CHAPTER VI

SUMMARY

Purpose of the Project

The purpose of this project was to demonstrate that comprehensive rehabilitation services can more effectively meet the needs of severely and chronically disabled persons living in an isolated, mountainous and depressed area; namely, the Appalachian Region. Specific subsidiary purposes were:

To demonstrate that utilization of various disciplines, including medical, vocational, psychological and social, coordinated with assistance from other professional and non-professional groups can more effectively provide rehabilitation services.

To demonstrate that development and utilization of community resources for rehabilitation will return a greater number of disabled persons to the status of self-sufficiency, self-support, and self-esteem.

Methodology

Two organizations have major roles in the administration of the program:

1. Appalachian Regional Hospitals, Inc.:

This organization, one of the applicants for V.R.A. Grant No. RD-1642-M, provides some staff and facilities for the project. It consists of a chain of ten hospitals throughout Eastern Kentucky,

Western Virginia and West Virginia which has pioneered efforts to provide comprehensive medical services in these economically depressed areas. The Harlan Appalachian Regional Hospital in Harlan, Kentucky, furnishes physical and administrative facilities and supplies. These facilities and their maintenance together with supporting administrative costs make up ARH's financial contribution of approximately $7,500.00 annually. Facilities on the hospital grounds provide separate accomodations for staff members of the Rehabilitation Project Center, with one of the project's rehabilitation counselors working out of the BRS office in Paintsville to serve clients through the Appalachian Regional Hospitals at McDowell and South Williamson.

2. Kentucky Bureau of Rehabilitation Services

This organization, the co-applicant for V.R.A. Grant No. 1642-M, acts through the rehabilitation counselors to implement rehabilitation services and financial assistance to disabled persons who meet eligibility requirements of the program.

Procedures

Disabled person referred to the project were those requiring comprehensive evaluation -- medical, social, psychological, and vocational -- whose needs cannot be met through the usual rehabiliation case work approach and available area resources. Potential cases are screened early as possible after admission.

The monthly reporting showed the orderly transition of cases from the time of referral from sources in the seven county area being served. The report gave the number of cases accepted for services along with those screened out.

Those cases referred to the project were evaluated utilizing the project staff. Following the evaluation, the rehabilitation counselor made recommendations to the referral source as to the type of service needed or as to the disposition of the case. Final decisions on referrals were the responsibility of the rehabilitation counselor after consultation with the evaluation team.

The method of reporting for the project was the same as for the regular program of Rehabilitation Services.

Setting

The project was conducted in one of the most severely depressed regions of the United States. The area served covered nine counties. Both the economy and the terrain are hostile to the rehabilitative process. Labor is cheap and so is life. Attitudes toward health and safety are characterized by apathy. These attitudes, persisting for decades, have contributed to the erosion of human resources and created a "check supported sub-culture" which absorbs the fallen worker, exacerbates his bitterness, suffocates his initiative, and traps him and his family in a subsistence level quagmire from which they rarely escape. He no longer struggles for a "place in the sun;" he settles for room to breathe, and his children too often settle for the same.

Mountains, narrow, curved roads, and the wide scatter of clients constituted an obstacle to personal contact between client and counselor. Homes of the average referral are very poor. They commonly consist of four rooms with no indoor plumbing and are frequently located on impassable roads in isolated hollows throughout the region. Much of the population has been on some type of welfare for years, and an attitude of despair and defeat pervades the region.

Results

A study of a random sample of closed and rehabilitated cases indicated a closed and rehabilitated case is most likely to be a 39 year old, married, white housewife and mother with an 8th grade education and a disorder of either the digestive system or the genito-urinary system. After "rehabilitation" she will most likely return to being a housewife.

As the project progressed there was a trend toward pure physical restoration for hospital referred cases and a trend away from "team" evaluation, training and job placement. This trend was accompanied by a steadily increasing number of closed-rehabilitated clients and a steady increase in the percentage of funds expended for hospitalization and medical treatment. The amount spent on training or retraining decreased.

Discussion

All major objectives were realized. The following observations and recommendations were made:

1. A large majority of clients referred for services will be homemakers or persons without any job prospects in the area. We would suggest a cooperative project with the Employment Service which would establish liaison between the job specialists in large cities and rehabilitation workers in Appalachia.

2. During the last two years the project was in danger of becoming little more than a source of third party payments for the hospital. Physical restoration rather than vocational rehabilitation became the primary end product of its activities. We would suggest that all contractural arrangements with cooperating facilities assume complete freedom on the part of the rehabilitation counselor in decisions concerning how monies will be applied to meeting area needs.

3. Many clients referred by other agencies and organizations will have some form of welfare or disability income and will be afraid of losing the income if they participate. Methods of motivation must be improved and made a part of any rehabilitation program for this region.

4. There is a tendency for older rather than younger family members to be referred for services. Programs should be developed to concentrate on whole family units rather than on the most obvious disability.

Psychological screening should be used to uncover mental retardation or emotional illness in the family.

5. There are two basic categories of people among the poor, those who are hopeless, helpless and devoid of potential and those who have the capacity to rise above their circumstances. It is difficult to separate them. All programs in Appalachia should contain provisions for detecting potential in all clients passing through the system.

CHAPTER VII

EPILOGUE

In the last chapter of his book about an Appalachian hollow culture, "Stinking Creek," John Fetterman wrote:

> A taxpayer may hope the millions are spent wisely in Knox County (Kentucky). A Christian may hope Preacher Marsee is right. But anyone must hope that the people who live along Stinking Creek find what they are seeking -- and have been seeking ever since their ancestors left the debtor prisons and filthy streets of England. And the most fervent hope of all is that they need not journey to Detroit or Cleveland or Chicago to find it, but find it on Stinking Creek.

We did not check to see if any of our clients lived on Stinking Creek, be we don't need to. Appalachia and the area we served is filled with other Stinking Creek communities, and the hope John Fetterman feels for the people he came to know is the hope we feel for those we know.

We have helped to restore the health of a lot of people and have made it possible for at least a few to find a job "on Stinking Creek." We have been able to make at least some contribution to a region-wide effort to stem the tide of catastrophe in the lives of these people. We have "done what we could do" but the tide is mounting. The maple leaves are turning white, and it will rain tonight in Appalachia, and "our brother's body is still uncovered." We are afraid for our brother and for his children and for his children's children.

APPENDIX A

Charts, Graphs, Maps relating to the
Demonstration Area and Appalachia in general

TABLE 1

POPULATION DATA FOR HARLAN AND HARLAN COUNTY
WITH COMPARISONS TO THE KENTUCKY RATE OF CHANGE, 1910-60

Year	Harlan Population	Harlan %Change	Harlan County Population	Harlan County %Change	Kentucky %Change
1910	657		10,566		6.6
1920	2,647	302.9	31,546	189.6	5.5
1930	4,327	63.5	64,557	104.6	8.2
1940	5,122	18.4	75,275	16.6	8.8
1950	4,786	- 6.6	71,751	- 4.7	3.5
1960	4,177	-12.7	51,107	-28.8	3.2

Source: U.S. Bureau of the Census, U.S. Census of Population: 1960, "General Population Characteristics," Kentucky

TABLE

CURRENT POTENTIAL LABOR SUPPLY, HARLAN COUNTY,
KENTUCKY AREA, NOVEMBER, 1966

County	Current Labor Potential Total	Male	Female
Area Total	17,850 - 18,850	9,300 - 9,800	8,550 - 9,050
Harlan	5,800 - 6,000	3,100 - 3,200	2,700 - 2,800
Bell	3,750 - 3,950	1,700 - 1,800	2,050 - 2,150
Leslie	1,600 - 1,800	1,000 - 1,100	600 - 700
Letcher	3,000 - 3,200	1,500 - 1,600	1,500 - 1,600
Perry	3,700 - 3,900	2,000 - 2,100	1,700 - 1,800

Source: Fantus Area Research, Inc.

TABLE 2

ECONOMIC CHARACTERISTICS OF THE POPULATION FOR HARLAN COUNTY AND KENTUCKY

Subject	Harlan County Male	Harlan County Female	Kentucky Male	Kentucky Female
Total Population	25,221	25,886	1,508,536	1,529,620
EMPLOYMENT STATUS				
Persons 14 years old & over	16,178	17,222	1,036,440	1,074,244
Labor force	9,508	2,954	743,255	291,234
Civilian labor force	9,496	0	705,411	290,783
Employed	8,184	2,788	660,728	275,216
Private wage and salary	6,948	2,015	440,020	208,384
Government workers	501	525	58,275	44,462
Self-employed	716	191	156,582	16,109
Unpaid family workers	19	57	5,851	6,261
Unemployed	1,312	166	44,683	15,567
Not in labor force	6,670	14,268	293,185	783,010
Inmates of institutions	80	9	15,336	8,791
Enrolled in school	2,384	2,431	94,734	97,825
Other and not reported	4,206	11,828	183,115	676,394
Under 65 years old	2,691	10,354	91,626	539,838
65 and over	1,515	1,474	91,489	136,556
MAJOR OCCUPATION GROUP OF EMPLOYED PERSONS				
All Employed	8,184	2,788	660,728	275,216
Professional and technical	565	579	46,440	36,879
Farmers and farm managers	72	4	91,669	2,339
Mgrs., officials, and props.	707	165	58,533	10,215
Clerical and kindred workers	305	502	35,711	66,343
Sales workers	401	425	39,837	25,265
Craftsmen and foremen	1,448	15	114,003	2,836
Operatives and kindred workers	3,777	92	140,192	45,305
Private household workers	11	387	1,123	25,183
Service workers	289	537	29,844	40,156
Farm laborers and farm foremen	31	0	33,143	2,046
Laborers, except farm and mine	368	0	44,227	1,671
Occupation not reported	210	82	26,006	16,978

Source: U.S. Bureau of the Census, U.S. Census of Population: 1960, "General Social and Economic Characteristics," Kentucky.

The following list of manufacturing firms indicates something of the lack of demand for labor in Harlan, Kentucky

TABLE 3

HARLAN MANUFACTURING FIRMS WITH PRODUCTS AND EMPLOYMENT, 1967

Firm	Product	Employment		
		Male	Female	Total
Chappell's Dairy, Inc.	Milk Products	85	5	90
Coca-Cola Bottling Works	Soft Drinks			20
Durham Printing & Offset Company	Job Printing	3	0	3
Enterprise Publishing Co., Inc.	Newspaper, job printing	19	3	22
Gaines Lumber Co., Inc.	Rough lumber	30	0	30
Harvey Green	Lumber	6	1	7
Harlan Farmers Supply Co., Inc.	Feed	10	1	11
Harlan Ice & Refrigerating Co.	Ice Cream	14	0	14
Harlan Ready Mix Concrete	Concrete	3	0	3
Harlan Wood Products Corp.	Dimension lumber, truck flooring	30	2	32
M & A Manufacturing Co., Inc.	Caskets	2	2	4
Modern Bakery, Inc.	Bakery Products	264	62	326
Muncy Printing Co.	Job printing	2	1	3
Smith Beverage Co.	Carbonated Beverages	7	1	8
Wardrup Provision Co., Inc.	Meat packing	48	5	53

TABLE 4

HARLAN AREA COVERED EMPLOYMENT
ALL INDUSTRIES, SEPTEMBER, 1966

	Area Total	Harlan	Bell	Leslie	Letcher	Perry
Mining and Quarrying	7,926	2,771	632	484	2,433	1,606
Contract Construction	538	181	150	0	85	122
Manufacturing	2,231	498	1,357	110	138	128
Transportation, Communication and Utilities	977	202	418	15	78	264
Wholesale and Retail Trade	3,720	1,168	1,056	68	542	886
Finance, Ins. and Real Estate	496	130	189	8	49	120
Services	1,359	459	350	27	186	337
Other	9	6	3	0	0	0
Total	17,256	5,415	4,155	712	3,511	3,463

Source: Kentucky Department of Economic Security (Number of Workers Covered by Kentucky Unemployment Insurance Law Classified by Industry and County).

TABLE 5

HARLAN AREA MANUFACTURING EMPLOYMENT
SEPTEMBER, 1966

	Area Total	Harlan	Bell	Leslie	Letcher	Perry
Total manufacturing	2,231	498	1,357	110	138	128
Food and kindred products	615	298	183	0	53	81
Tobacco	1	0	1	0	0	0
Clothing, textile and leather	416	0	416	0	0	0
Lumber and furniture	722	173	335	110	69	35
Print., publ. and paper	69	21	34	0	2	12
Chemicals, coal petroleum and rubber	63	0	63	0	0	0
Stone, Clay and glass	42	0	28	0	14	0
Primary metals	0	0	0	0	0	0
Machinery, metal products and equipment	297	0	297	0	0	0
Other	6	6	0	0	0	0

Source: Kentucky Department of Economic Security (Number of Workers in Manufacturing Industries Covered by Kentucky Unemployment Insurance Law Classified by Industry and County).

TABLE 6

HARLAN AREA AGRICULTURAL EMPLOYMENT
FALL, 1959

	Family Workers	Hired Workers*	Total
Area Total:	1,514	31	1,545
Harlan	267	15	828
Bell	215	15	230
Leslie	311	0	311
Letcher	341	0	341
Perry	380	1	381

*Regular Workers (Employed 150 days or more).
Source: U.S. Bureau of the Census, U.S. Census of Agriculture: 1959, Kentucky.

TABLE 7

NUMBER OF UNEMPLOYED AND RATE OF UNEMPLOYMENT, APPALACHIA AND BALANCE OF UNITED STATES, 1960

Appalachia	Total Civilian unemployed	Unemployment rate
Alabama	41,688	5.8
Georgia	12,083	4.8
Kentucky	20,425	8.8
Maryland	5,622	7.9
North Carolina	13,553	4.8
Ohio	19,609	7.9
Pennsylvania	172,014	7.9
Tennessee	34,358	6.0
Virginia	12,098	6.9
West Virginia	49,018	8.3
Total Appalachia	380,468	7.1
Balance of the United States	3,124,359	5.0

Source: Compiled from U.S. Bureau of the Census Reports, 1960.

TABLE 8

PER CAPITA INCOME, APPALACHIA AND
BALANCE OF UNITED STATES, 1960

State	Appalachian portion	Rest of State	Total State
Alabama	1,254	1,231	1,246
Georgia	1,194	1,393	1,359
Kentucky	841	1,519	1,321
Maryland	1,589	2,031	2,002
North Carolina	1,169	1,269	1,251
Ohio	1,396	2,003	1,956
Pennsylvania	1,680	2,047	1,854
Tennessee	1,257	1,369	1,318
Virginia	1,008	1,698	1,598
West Virginia	1,378	1,378	1,378
Total Appalachia			1,405
Balance of United States			1,901

Source: Compiled from U.S. Bureau of the Census Reports, 1960.

TABLE 9

EDUCATIONAL LEVELS OF PERSONS 25 YEARS OLD AND OVER FOR APPALACHIA, BY STATES AND BALANCE OF UNITED STATES METROPOLITAN AND NONMETROPOLITAN, 1960

State or Region	Persons 25 years old and over	Percent Completed: Less than 5 years schooling	Percent Completed: 4 years of high school or more	Percent Completed: 4 years of college or more
Appalachian portion of:				
Alabama	1,083,026	15.0	30.1	5.8
Georgia	351,144	17.7	22.8	3.7
Kentucky	434,175	22.1	17.4	3.0
Maryland	111,969	7.7	31.9	4.4
North Carolina	414,301	16.3	28.8	5.0
Ohio	407,444	7.1	33.3	4.0
Pennsylvania	3,443,354	7.2	38.4	5.7
Tennessee	857,720	15.9	28.5	5.5
Virginia	293,481	19.2	23.6	4.0
West Virginia	999,731	11.0	30.6	5.2
Total Appalachia	8,396,345	11.6	32.3	5.2
Metropolitan	3,660,966	9.1	38.2	6.5
Nonmetropolitan	4,735,379	13.4	28.0	4.3
Balance of United States	91,041,739	8.0	41.8	7.9
Metropolitan	60,251,979	6.9	44.6	9.0
Nonmetropolitan	30,789,760	10.3	36.5	5.8

Source: Compiled from U.S. Bureau of Census published reports.

TABLE 10

PERCENT CHANGE IN POPULATION BY TYPE OF RESIDENCE, APPALACHIA AND BALANCE OF UNITED STATES, 1950 TO 1960

State or Region	Urban	Rural		
		Total	Nonfarm	Farm
Appalachian portion of:				
Alabama	+29.5	-12.8	+40.3	-58.6
Georgia	+29.8	+ 2.6	+77.5	-67.0
Kentucky	+ 1.6	-17.8	+26.2	-56.8
Maryland	+ 5.2	+ 1.6	+14.0	-44.3
North Carolina	+10.7	- 0.4	+58.9	-55.0
Ohio	+17.5	+ 6.2	+48.3	-51.6
Pennsylvania	+ 3.1	+ 1.6	+17.1	-53.3
Tennessee	+18.8	- 3.2	+41.1	-45.6
Virginia	+17.4	- 9.4	+20.9	-49.9
West Virginia	+ 2.4	-12.3	+14.2	-70.6
Appalachia	+ 9.4	- 5.4	+28.6	-56.3
Balance of United States	+30.8	(*)	+29.3	-39.1

*Increase of less than ½ of 1 percent.
Source: Compiled from U.S. Bureau of Census published reports.

TABLE 11

NET MIGRATION FROM APPALACHIA BY STATE, 1950-60

State	Net Migration, 1950-60	
	Total State	Appalachian Portion of State
Alabama	-368,442	-191,827
Georgia	-213,569	- 53,656
Kentucky	-389,730	-367,333
Maryland	+319,978	- 14,751
North Carolina	-327,987	-106,722
Ohio	+408,576	- 18,068
Pennsylvania	-475,286	-529,112
Tennessee	-272,605	-172,426
Virginia	+ 14,722	-113,079
West Virginia	-446,711	-446,711
Total	-1,751,054	-2,013,635

Source: Compiled from U.S. Bureau of the Census published reports.

TABLE 12

RECIPIENTS AND PAYMENTS FROM PUBLIC ASSISTANCE PROGRAMS SUPPORTED BY THE FEDERAL GOVERNMENT IN APPALACHIA AND BALANCE OF UNITED STATES, JUNE 1963

	Appalachia	Balance of United States	Appalachia as percent of the total United States
Total public assistance payments:			
June 1963[a]	$33,634,400	$347,987,200	8.81
Per Capita[b]	$2.19	$2.12	------
Total public assistance recipients:			
June 1963[a]	907,710	6,697,504	11.94
Percent of total population receiving aid[b]	5.92	4.08	------
Public assistance programs, June 1963[a], by type:			
Aid to families with dependent children:			
Payments	$13,436,300	$108,341,700	11.03
Families receiving aid	131,540	831,146	13.66
Percent of total families receiving aid[b]	3.40	2.01	------
Children receiving aid	392,418	2,559,967	13.29
Percent of total persons under 18 years of age receiving aid[b]	7.01	4.36	------
Old age assistance:			
Payments	$12,752,300	$156,398,700	7.54
Persons receiving aid	203,371	1,995,545	9.25
Percent of total aged, age 65 and over receiving aid[b]	14.21	13.50	------
Medical assistance to the aged:			
Payments[c]	$1,495,100	$25,117,900	5.62
Persons receiving aid[c]	16,246	120,090	11.92
Percent of total persons age 65 and over receiving aid[b]	1.14	0.81	------
Aid to the permanently and totally disabled:			
Payments	$2,924,500	$31,608,600	8.47
Persons receiving aid	52,061	409,477	11.28
% of total population receiving aid[b]	0.34	0.25	------
Aid to the blind:			
Payments	$1,283,200	$6,715,300	16.04
Persons receiving aid	18,933	79,452	19.24
% of total population receiving aid[b]	0.12	0.05	------
General Assistance:			
Payments[d]	$1,743,000	$19,805,000	8.09
Families receiving aid[d]	32,371	742,629	4.18
% of total families receiving aid[b]	0.84	1.80	------

Source: Published and unpublished reports of the Department of Health, Education, and Welfare and the U.S. Bureau of the Census.

Notes for Table 12

[a]Kentucky data included in Appalachian figures are for December 1962.

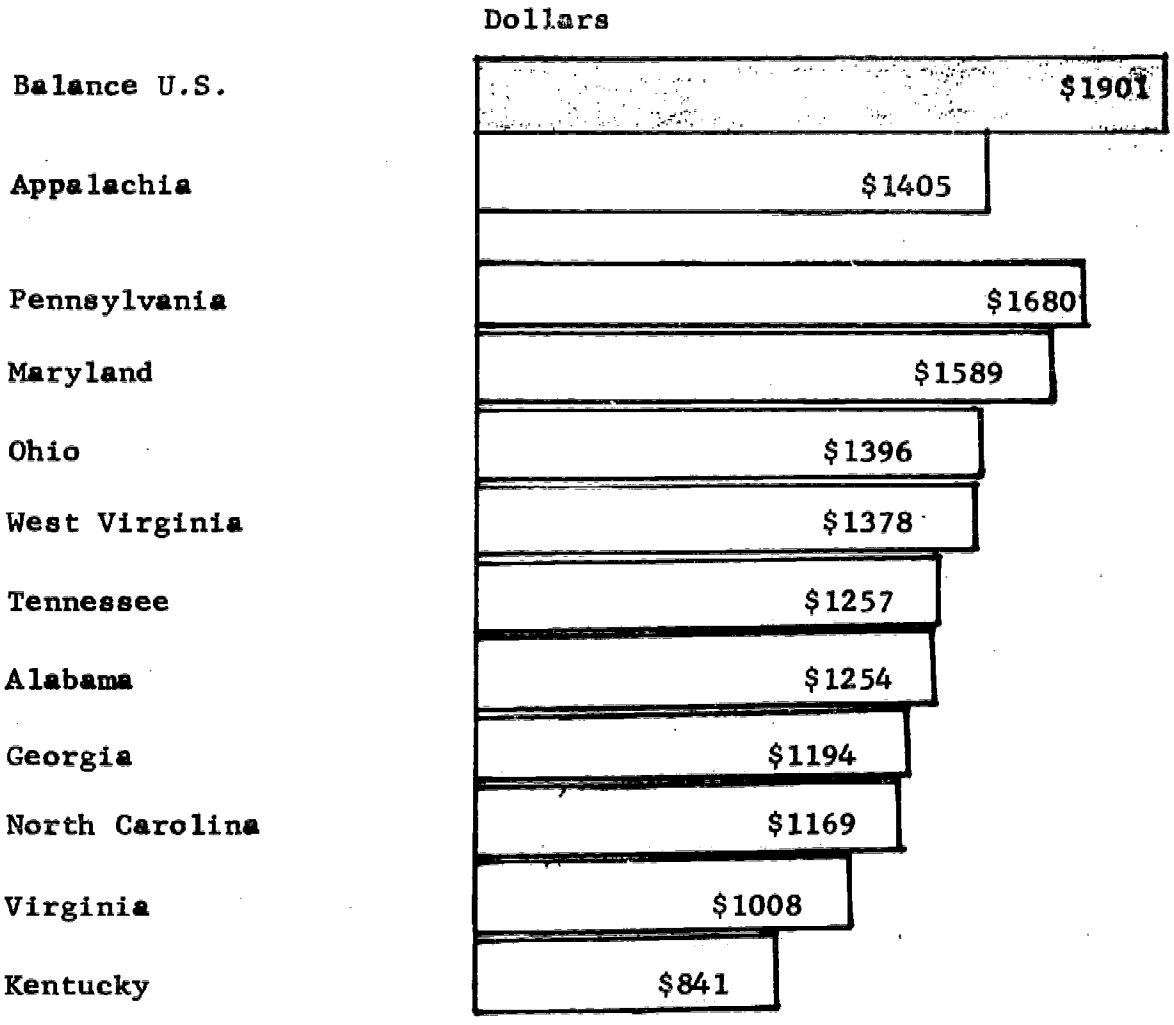
[b]Based on 1960 U.S. census data (8.5% of the U.S. population, 8.6% of the total U.S. families, 8.1% of the total persons under 18 years of age and 8.8% of total persons age 65 and over resided in Appalachia in 1960).

[c]There were 29 States with MAA programs in June 1963, including Alabama, Kentucky, Maryland, Pennsylvania, Tennessee, and West Virginia in Appalachia.

[d]Appalachian data presented here are under-representative of the total Appalachian participation, due to the exclusion of data from Kentucky. Kentucky data were not available in a form which would allow the derivation of separate data for the Appalachian part of the State. This also explains the low percentage of the total families receiving general assistance.

FIGURE A

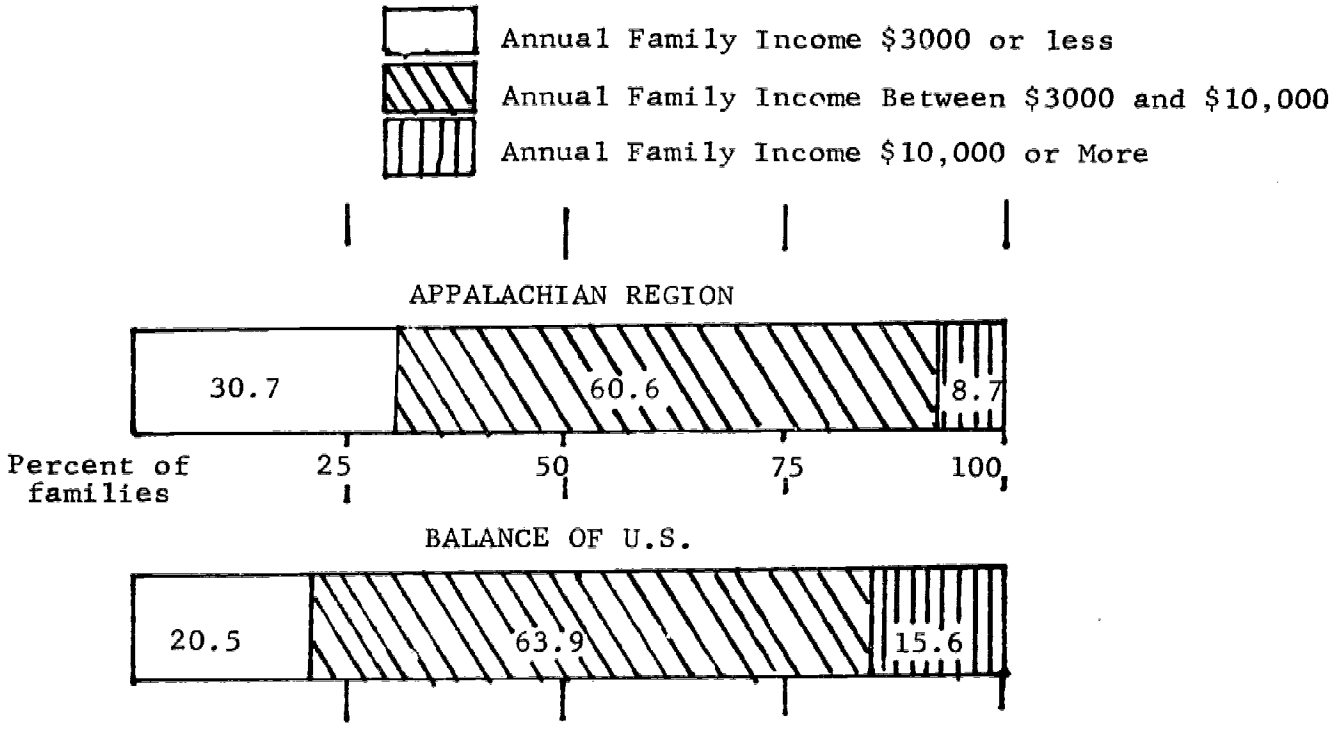
THE INCOME GAP: PER CAPITA INCOME FOR APPALACHIA BY STATES AND BALANCE OF U.S., 1960



Source: Compiled from the U.S. Bureau of the Census published reports.

FIGURE B

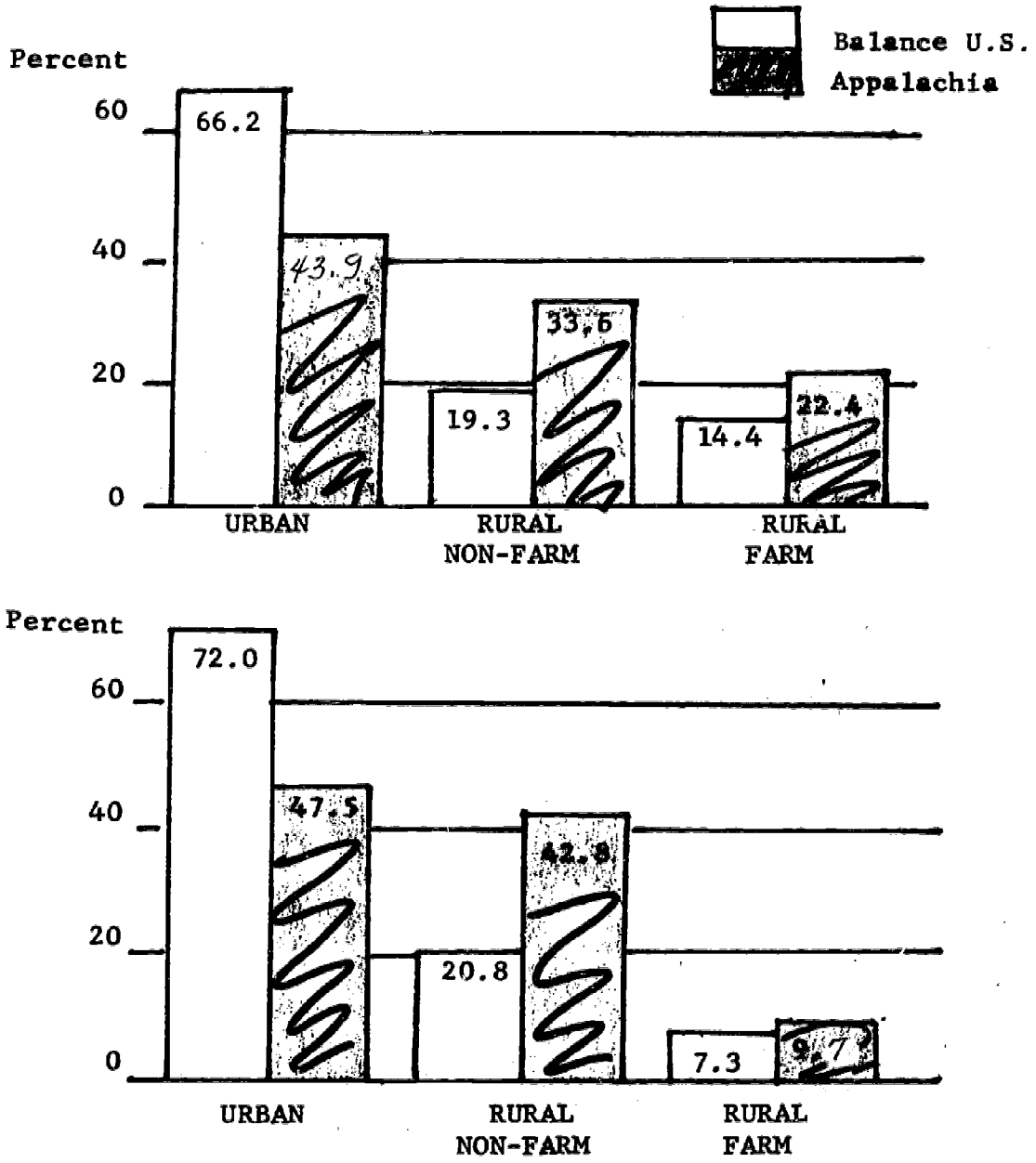
THE INCOME GAP: DISTRIBUTION OF FAMILIES BY INCOME GROUP FOR APPALACHIA AND BALANCE OF U.S., 1960



Source: Compiled from the U.S. Bureau of the Census Published Reports.

FIGURE C

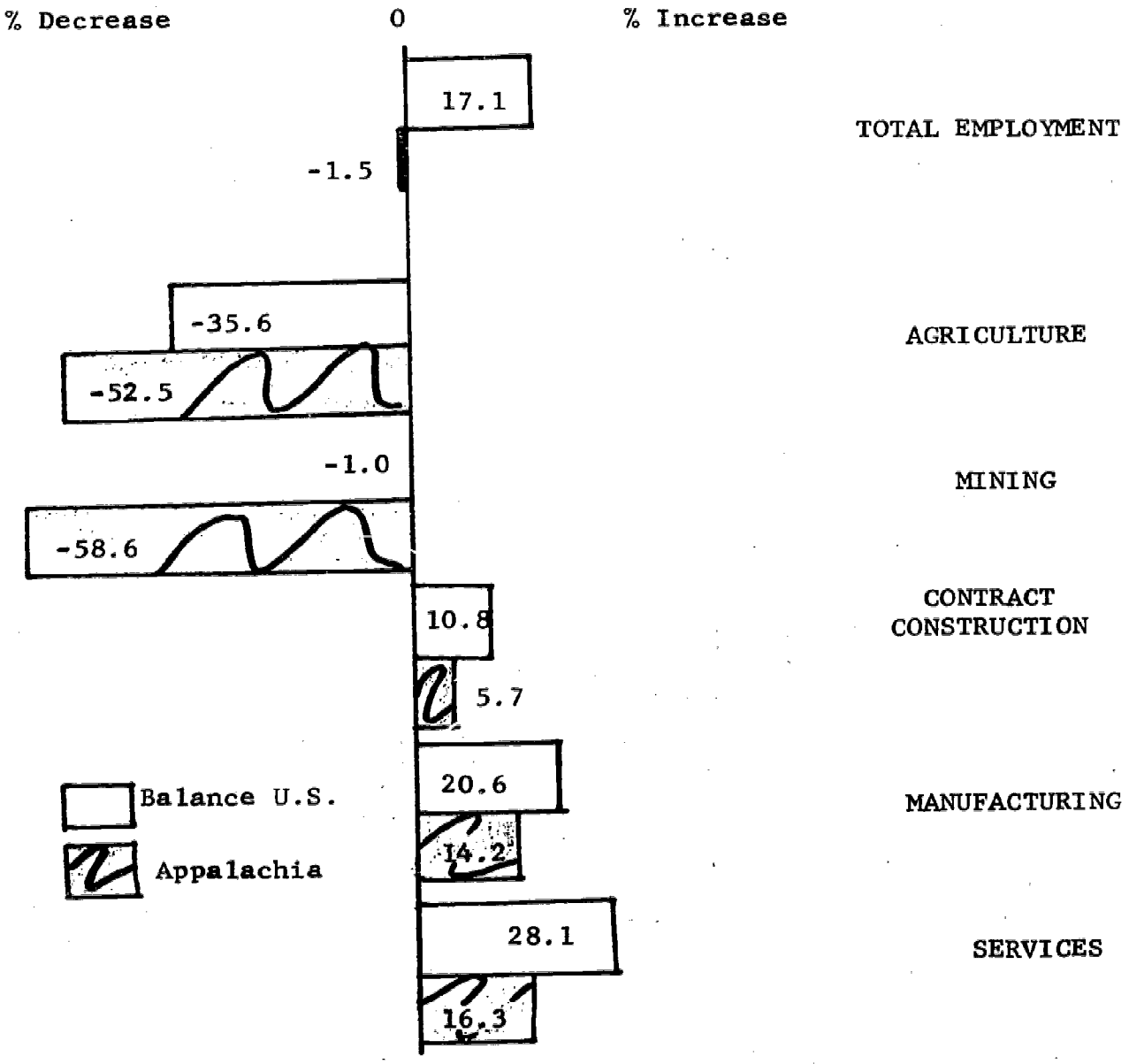
POPULATION SHIFT: APPALACHIA AND BALANCE OF U.S., 1950 TO 1960



Source: Compiled from the U.S. Bureau of the Census published reports.

FIGURE D

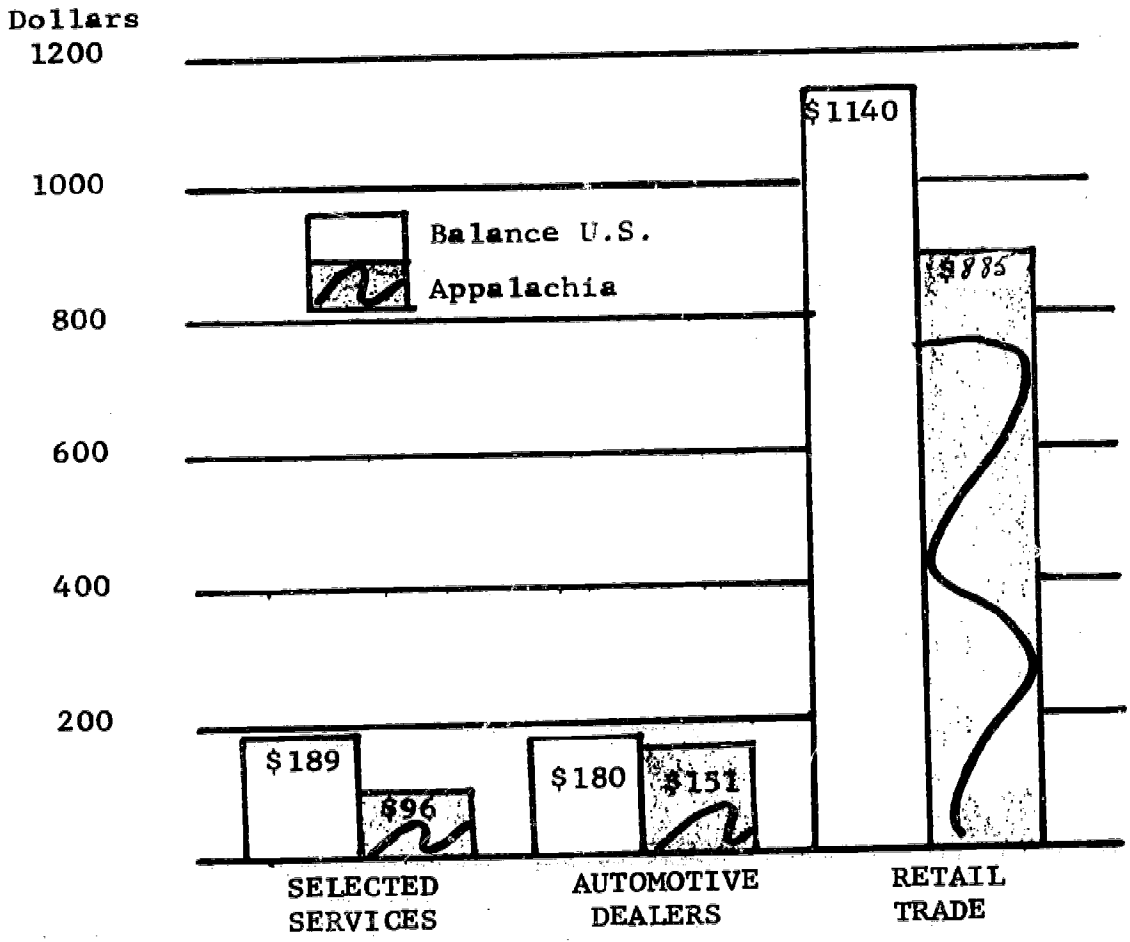
EMPLOYMENT CHANGE IN MAJOR INDUSTRY GROUPS FOR APPALACHIA AND BALANCE OF U.S., 1950 TO 1960



Source: Compiled from the U.S. Bureau of the Census published reports.

FIGURE E

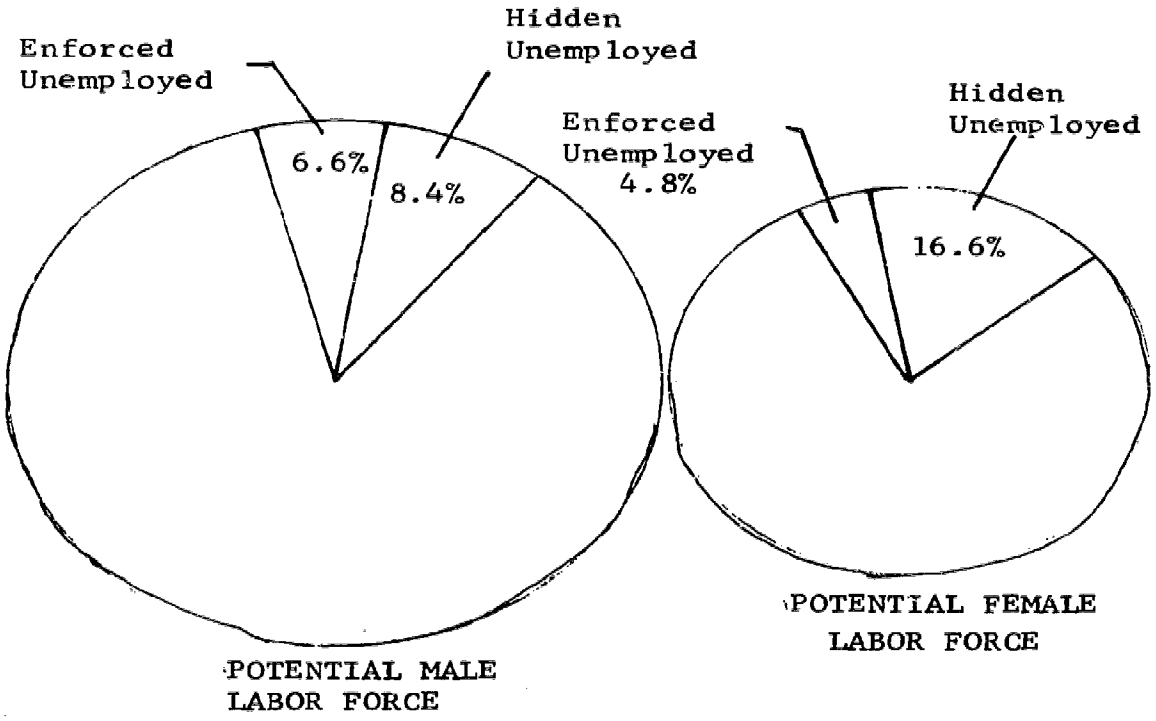
THE SALES GAP: COMPARISON OF PER CAPITA PURCHASES IN THREE MAJOR SALES CATEGORIES IN APPALACHIA AND BALANCE OF U.S., 1958



Source: Compiled from the U.S. Bureau of the Census Published Reports.

FIGURE F

THE JOB GAP: WITHIN APPALACHIA, 1960



Enforced Unemployed: Those who seek work and can not find it.

Male	282,688
Female	97,780

Hidden Unemployed: The number of additional workers the Region would have if participation in the labor force were equal to the national rate.

Male	357,398
Female	337,888

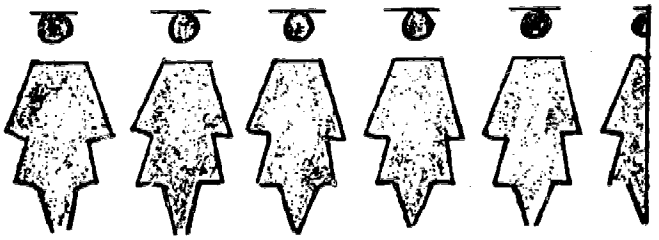
Job Gap (assuming a 4% unemployment rate) 1,093,754

Source: Compiled from the U.S. Bureau of the Census published reports.

FIGURE 6

THE EDUCATION GAP: POTENTIAL INCREASE IN HIGH SCHOOL AND COLLEGE IN APPALACHIA ASSUMING EDUCATION LEVELS EQUIVALENT TO NATIONAL AVERAGE, 1960

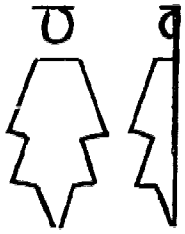
High School Graduates □



2,712,000

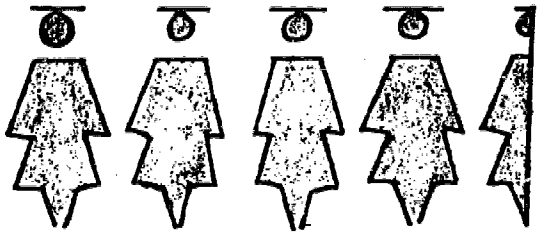
(Each figure represents 500,000 Graduates)

High School Graduate Deficits □



798,000

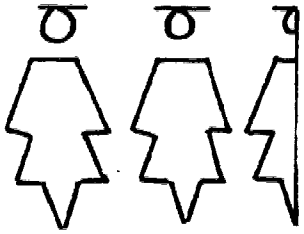
College Graduates □



437,000

(Each figure represents 100,000 Graduates)

College Graduate Deficits □



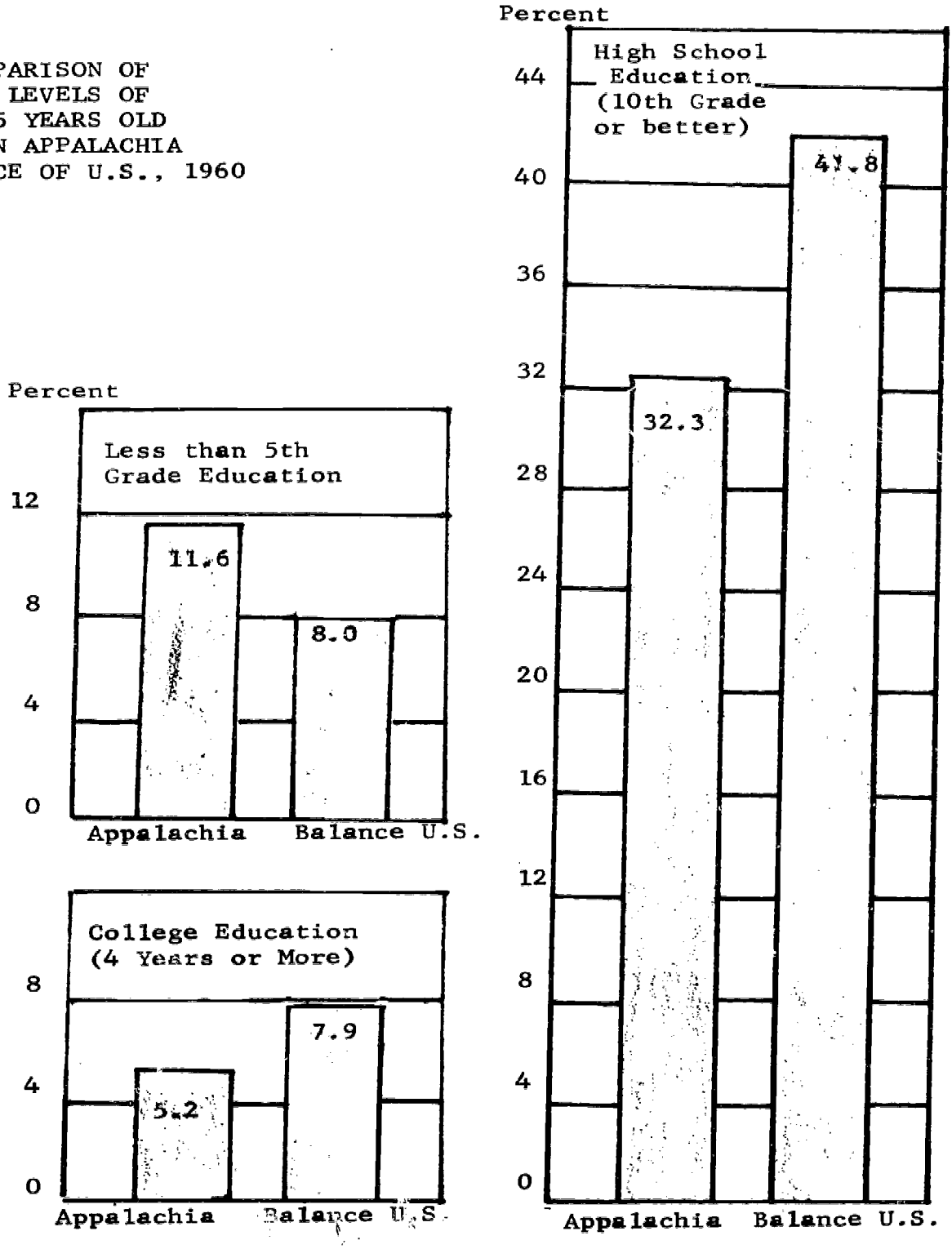
227,000

□ 25 years old and over, within Appalachian Population

Source: Compiled from the U.S. Bureau of the Census published reports.

FIGURE H

THE EDUCATION GAP: COMPARISON OF EDUCATION LEVELS OF PERSONS 25 YEARS OLD OR OVER IN APPALACHIA AND BALANCE OF U.S., 1960



Source: Compiled from the U.S. Bureau of the Census published reports.

APPENDIX B

A History of Harlan, Kentucky

HISTORY

Harlan County, the sixtieth county formed in Kentucky, dates from 1819. Its territory was taken from Floyd and Knox Counties. In turn, Letcher (1842), Bell (1867), and Leslie (1878) were given portions of Harlan County, but she still contains 469 square miles. Located in the southeastern part of the state along the Virginia border, Harlan has the highest elevation of any Kentucky county -- 4,150 feet on Big Black Mountain near Lynch in its northeastern part. The Cumberland Mountains form the Virginia-Kentucky boundary line, thus Harlan County is high, mountainous and rugged. There are no natural breaks in the mountains between Harlan and Virginia, but the Louisville and Nashville Railroad has tunneled through to Virginia near Jonesville in Lee County, and two highways cross the mountains from Kentucky: one, opening near Pennington Gap in Lee County, and the other near Appalachia in Wise County. The soil is fertile in the valleys, but the mountain sides are too steep for agricultural cultivation. The mountains are covered with timber, about 91 per cent of the total land area is forested, and they are underlaid with thick seams of coal. The Cumberland River rises in Letcher County and flows across the entire fifty mile length of Harlan County in a southwesterly direction. This stream often plays havoc during flood tide with houses and gardens because the people encroach too close to its low water level.

The early pioneers were predominantly of Anglo-Saxon descent. Many of them were Revolutionary soldiers whose services had been paid for with tracts of land. Harlan Countians have always been a colorful and interesting people. They are keen of eye and memory, quick of temper, but are generous and hospitable. The Harlan mountaineer will exchange rifle shots with his enemy in heated controversy, and feed him when he is helpless and hungry. Generally speaking, he is an individualist. He forms his own opinion, minds his own business, takes orders from no man except his Maker, and then wants to be sure that He is right.

The first white settlers in Harlan County were the family and friends of Samuel Howard, who came in 1796. His son, Wix Howard, was the first white child born there. Soon others came, among whom was George Brittain. He served in the War of 1812, then turned to politics. It was chiefly due to his work that Harlan County was established. He served in the Legislature from Knox County at the time Harlan was established (he lived in the part of Knox that was incorporated in Harlan), and manipulated the moves to get a new county formed.

A mound containing skeletons of a pre-Indian race once existed where the courthouse now stands. Those ancient people buried their dead in a sitting position. Some earthern pots were found that indicated a knowledge of how to mix and burn clays that even modern science has not excelled.

During the Civil War Harlan County suffered a great deal in the loss of some of her best citizens. The courthouse and several other buildings were burned with all their records and contents.

The Rhododendron Trail is the name given to Highway 119 between Baxter and Pineville, about one-half of which is in Harlan County, because that shrub blooms in profusion along the way from late May to late July.

Harlan County was named for Major Silas Harlan, a Virginian who came to Kentucky in 1774 and took an active part in the battles and skirmishes with the Indians. He built a fort at Harlan's Station, near Harrodsburg, in 1778. He accompanied General George Rogers Clark on the Illinois campaign in 1779, and proved to be an excellent and popular officer. He fought in the Battle of Blue Licks and lost his life on August 19, 1782. He was six feet and two inches tall, and very handsome. Many of his contemporaries wondered why he never married since the custom at that time was to marry early in life. He was in his early thirties when he died.

The first county seat was Mount Pleasant, a name given to present-day Harlan Town by early Indian fighters. This name remained until 1912 when it was incorporated under the name of Harlan. It is 1,197 feet above sea level and had a population of 4,177 in 1966. The town is located in the valley between Big and Little Black Mountains at the confluence of the three forks of the upper Cumberland River. It remained a backwoods village for more than a century; then, after the Louisville and Nashville Railroad came in 1911, the town became an important lumber and coal shipping point.

Harlan has been beset with labor troubles since 1916 when employees struck for higher wages. In 1924 a strike closed the mines on Black Mountain Coal Corporation which resulted in considerable suffering among the families dependent on the mines for a living. In 1931 the employees of the Evarts Coal Company struck to maintain wage rates that would keep them from starvation and bankruptcy. Both sides, the employers and employees, resorted to violence, and several people were killed. A Congressional Committee investigated the situation, and on May 6, 1938, the National Labor Relations Board began its prosecution of forty-four Harlan County coal operators and former county sheriffs. The trial ended on August 1, 1938, with a hung jury, but on September 1, the Coal Operators Association signed a contract with the United Mine Workers Union.

In 1964, only 1,100 acres were planted in corn, and 1,200 acres of hay were harvested. Only 15,300 hens, 900 cattle, and 1,800 hogs were raised. In 1966, Harlan had 14 industrial plants, and Evarts had 2. The Modern Bakery Incorporated, and Wardrup Provision Company, Incorporated, both in Harlan, and The Georgia Pacific Corporation in Evarts, which manufactures lumber, are the largest.

Harlan County ranked fourth in the state in the value of mineral production in 1964. There were 123 underground coal mines, 11 strip mines and 14 auger mines. The United States Steel Company and Harlan Fuel Company were the leading producers. The county produced 5,641,856 short tons of

coal. Nally & Boone Stone Company crushed limestone for concrete, roads, and agstone.

Judge J. Grant Forester played an important role in the history of Harlan County at the turn of the century. He helped write Kentucky's present Constitution. Will Ward Duffield was an engineer and geologist employed by the Kentenia Corporation in 1903, who later became Mayor of Harlan. Judge W. F. Hall served in various capacities as judge, lawyer and industrialist for half a century. Henry L. Howard served in the State Legislature, and as Commonwealth Attorney for Bell, Leslie, Letcher and Harlan Counties for eighteen years. Senator Hiram Brock, the only student in attendance at the Kentucky State College, as the University of Kentucky was then known, from Harlan County in 1900, served longer in the Kentucky State Senate than any other man -- 24 years. While in that office, he wrote the Brock-Gilbert Law, a clean election law. He sponsored the Brock-Howard Law, a free textbook law. He was the power behind the movement by which Cumberland Falls was preserved. He served on the Board of Eastern Kentucky University for 20 years. Eastern Kentucky University has Brock Auditorium which was named for him.

Source: The Harlan County Chamber of Commerce and The Kentucky Department of Commerce, Industrial Resources, Harlan, Kentucky, Frankfort, Kentucky, 1967.

APPENDIX C

Copy of Contract between the
Kentucky Bureau of Rehabilitation Services
and
Appalachian Regional Hospitals, Inc.

VOCATIONAL REHABILITATION SERVICES

CONTRACT

This agreement made and entered into this 1st day of July, 1967, by and between the Kentucky Bureau of Rehabilitation Services, Department of Education, Frankfort, Kentucky, for and on behalf of the Commonwealth of Kentucky, party of the first part, and Appalachian Regional Hospitals, Inc., P. O. Box 8086, Lexington, Kentucky, part of the second part.

Witnesseth:

That whereas it is the intention of the General Assembly of Kentucky to provide for and improve the rehabilitation of the physically handicapped citizens of the Commonwealth of Kentucky in order that they may increase their social and economic welfare and the productive capacity of the Commonwealth and the Nation, as declared in KRS 163.110;

Whereas KRS 163.130 provides that rehabilitation services shall be provided directly or through public or private instrumentalities to any handicapped individual meeting the requisites therein detailed;

Whereas the Commonwealth of Kentucky has accepted and agrees to comply with the provisions of certain acts of the Congress of the United States of America, relating to rehabilitation, as may be deemed desirable and necessary, such acceptance being outlined in KRS 163.160;

That whereas the Kentucky Bureau of Rehabilitation Services and the Appalachian Regional Hospitals, Inc., jointly made an application for a Research and Demonstration Grant to the Vocational Rehabilitation Administration, Department of Health, Education and Welfare, to be carried out cooperatively with the Harlan Regional Hospital and that federal policy of the Grant agency required that the Kentucky Bureau of Rehabilitation Services be designated as sponsor to receive the Grant of the Federal agency understands that the Appalachian Regional Hospitals, Inc., are to participate in developing the project;

Whereas the Kentucky Bureau of Rehabilitation Services applied to the Department of Health, Education and Welfare, Vocational Rehabilitation Administration, Washington, D. C., for a grant award for a demonstration project now labelled project RD-1642-M, "Regional Demonstration of Comprehensive Rehabilitation Services in a Rural, Mountainous, Economically Depressed Area...Eastern Kentucky" and whereas such grant award from said agency has been made with a supplement and accepted by said applicant.

Now, in order to effectuate the above policies and purposes, this agreement is made.

1. It is understood and agreed that the Commonwealth shall make payments for this project, under the conditions hereinafter outlined, to the Second Party in a total amount not to exceed Seventy-Five Thousand Dollars ($75,000.00).

2. The Second Party, in organizing and administering a program of services for the subject rehabilitation project center, and in making disbursements or financial commitments in connection therewith, shall

be governed by the following budget worksheet

PERSONAL SERVICES		
Professional and Technical	Per Cent of Time	
Project Medical Director W. J. Lee	20	$ 5,200
Clinical-Psychological Services	as required	5,000
Social Worker John Hopkins	100	6,508
Physical Therapist M. Ashton	50	4,120
Occupational Technician A. Steele	100	3,643
Clerical		
Secretary Mrs. Gary Miller	100	4,000
Secretary Mrs. Vaughn	100	4,387
Personnel Benefits		
FICA - Blue Cross	@ cost	1,253
Total Personal Services		34,111
COMMUNICATIONS		
Postage		200
Telephone		100
Total Communications		300
TRAVEL		
Staff		1,000
Client		200
Total Travel		1,200

CLIENT REHABILITATION SERVICES	
Hospitalization, Diagnostic	27,389
Medical Examinations	12,000
Total Clinet Rehabilitation Services	39,389
TOTAL CONTRACT	$ 75,000

OTHER

Estimated cost of supplies and services ($7,500.00) to be provided by Harlan Appalachian Hospitals, Inc., and certified as expenditures for project purposes:

Space or rent for offices, rehabilitation therapies, maintenance, heat, lights, local telephone, administrative services, bookkeeping services, supplies, clerical support as needed.

This total not to be reimbursed to hospital as a part of contract.

3. Any substantial departure from the worksheet will require the prior approval of the party of the first part and the appropriate federal agency.

4. The purpose of this project is to demonstrate the effectiveness of comprehensive rehabilitation services--medical, vocational, psychologi and social--to severely disabled and chronically disabled persons living in an isolated, mountainous, depressed area of the Appalachian region.

5. The specific services to be planned and provided to project clients include, but are not limited to, rehabilitation evaluation which will involve medical, social, psychological and vocational evaluation; maintenance of modern case records and information recording systems; clerical services, physical facilities and other supportive services for

the project.

6. The project shall include the 39 county depressed area in the Appalachian area of Kentucky.

7. For the present, at least, the project sponsors desire to operate the project on a multiple disability basis, including such disability types as cardiacs, hemiplegics, cord injured cases, neuromuscular disabilities, arthritics, amputees, and general medical disabilities. Persons whose primary disability is either mental illness or mental retardation will not be accepted in the project. At present severe speech and hearing problems will be excluded because of lack of specialized personnel to handle them. As the project progresses, it may be necessary to limit the number of disabilities included in order to secure a more representative sample.

8. It is understood and agreed by the parties that, in connection with the payment of funds involving the $75,000.00, such payments, from first party to second party, will be made on a monthly basis as reimbursements for services, supplies and utilities previously performed or furnished.

9. The party of the second part shall keep records reflecting expenditures of the funds and shall certify to the first party monthly itemized expenditures of the funds. The minimum requirements of the Commonwealth and the federal government shall be complied with as concerns audit and accounting control procedures.

10. Party of the second part is legally entitled to enter into contracts with the Commonwealth of Kentucky and is not in violation of

any conflict of interest statute.

11. This contract will not be effective unless and until the award of contract (Form P-16) is issued by the Department of Finance and will not be binding beyond the effective period as shown on said award.

12. This contract may be terminated by either party upon giving thirty days written notice to the other party by registered mail.

In witness whereof the parties hereto have subscribed their signature this day and date first above written.

Appalachian Regional Hospitals, Inc.

Assistant Superintendent for Rehabilitation Services

APPROVED:

Director of Purchases

Commissioner of Finance

Assistant Attorney General

Commissioner of Personnel

APPENDIX D

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